Shire of Dardanup

APPENDICES

PART 1

ORDINARY MEETING

To Be Held

Wednesday, 31 October 2018
Commencing at 5.00pm

At

Shire of Dardanup
ADMINISTRATION CENTRE EATON
1 Council Drive - EATON

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Upon request.

Waste Authority

Waste Strategy 2030

Western Australia's Waste Strategy

DRAFT ONLY

(Appendix ORD: 12.1A)

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Statutory context
The Waste Authority is charged with promoting better waste management practices in Western Australia under the *Waste Avoidance and Resources Recovery Act 2007*. One of the Authority's functions under the Act is to draft, for the Minister for Environment's approval, a long term waste strategy for the whole of the State for continuous improvement of waste services, waste avoidance and resource recovery, benchmarked against best practice and targets for waste reduction, resource recovery and the diversion of waste from landfill disposal. This strategy takes a ten year and beyond view and must be reviewed at least every five years. This Strategy was approved by the Minister for Environment on xx xx 2018, and replaces Western Australia's inaugural waste strategy, *Creating the Right Environment*, approved and published in 2012.

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(Appendix ORD: 12.1A)

Invitation from the Minister

Western Australia is a spectacularly beautiful place with a vibrant and growing population.

It's because of this that we all have a significant opportunity in terms of how we live our lives and the impact we have on our environment.

We can make a significant impact by acting on the waste we generate and how we manage resources from extraction through to manufacturing, use and disposal.

Right now, Western Australia is close to leading the "wrong lists". National figures from 2014-15 (the latest available as at September 2018) show Western Australia had the highest rate of waste generation per capita[1] in the nation, and the equal third lowest rate of resource recovery – 13 points below the national average.

We have an obligation to our current community and generations to come to generate less waste, extract more from our valuable resources and to better manage the disposal of our waste.

Waste Strategy 2030 rises to address that challenge and the opportunities that better choices and better waste management present.

We will have to work hard to meet the ambitious targets set out in this Strategy and deliver against long-standing issues in the waste community. We won't, for example, be able to meet our 2025 recovery targets without all metropolitan Local Government's adopting a three-bin FOGO system, and I will work with those local governments to achieve this.

I acknowledge that with this comes significant environmental, social, cultural and economic impacts and opportunities associated with improved waste management.

Across Australia, the waste sector contributes more than $10 billion a year to the economy. At the same time, materials worth hundreds of millions of dollars are lost to landfill each year (ABS, 2014).

High-performing waste and recycling systems which see materials recovered, reused and recycled can and do reduce this impact. The creation of a circular economy has the potential to harness the economic value of these materials that would otherwise be lost, and drive investment in infrastructure and jobs.

Reducing the amount of waste disposed of to landfill can also generate significant economic opportunities for the Western Australian community. The National Waste Policy estimates that for each 10,000 tonnes of waste recycled, 9.2 full-time equivalent jobs are created compared to only 2.8 jobs for landfill (Environment Protection and Heritage Council, 2009).

With an increasing population and our current waste management performance, maintaining the status quo is not an option.

But there is an upside; we can make waste work for us – and enjoy the environmental, social, cultural and economic benefits improved waste management can deliver.

Waste is everyone's business – individuals, households, neighbourhoods, community groups, schools, small and big businesses, local governments, waste managers, the State Government and the media.

There's a big challenge ahead of us all and this strategy is about finding a united way forward.

The McGowan Government will continue to show leadership in the waste arena for the benefit of all Western Australians now and into the future.

As WA's Environment Minister, I encourage everyone to act on waste and own your impact – whether it's in your role as a consumer, producer, waste manager or regulator.

We've made good progress in recent years and there's great momentum building.

Let's harness that commitment and energy in the years ahead and work towards a cleaner future for all Western Australians.

Hon Stephen Dawson MLC
Minister for Environment

[1] Dr Joe Pickin and Paul Randell, *Australian National Waste Report 2016*, Department of the Environment and Energy, Energy and Blue Environment Pty Ltd. Figures exclude fly-ash (a by-product of coal-fired power stations)

Introduction by the Chair

Western Australians are consciously reusing, reprocessing, recycling and avoiding waste at an increasing rate. We are generating less waste and recycling more. However, to protect our unique environment from the impacts of waste and litter, and to maximise the benefits of good waste management, more work needs to be done.

Building on and updating the first *Western Australian Waste Strategy: Creating the Right Environment* published in 2012, this strategy introduces significant transformations aimed at Western Australia (WA) becoming a circular economy, with a greater focus on avoidance as well as moving to targets for material recovery and environmental protection in addition to landfill diversion.

A circular economy means transitioning from the current take-make-use and dispose system to a material efficiency approach which aims to keep products, components and materials at their highest utility and value for as long as possible.

In 2014-15, WA's recycling rate was 48 per cent, which is lower than other mainland states.

Waste collection and processing arrangements vary considerably across WA. Long-term planning for waste processing and recycling facilities and local recovery options would benefit resource recovery and promote the most efficient use of resources assisted by economic incentives, modern regulations, compliance and enforcement.

Community engagement, acceptance and awareness is as important as the provision of physical infrastructure and collection systems. Consistency of messaging across homes, workplaces and public areas is a key fundamental that needs to be tailored to local recovery infrastructure and systems.

The waste management sector is in a transitional phase and will require clear direction and guidance going forward that may include more directive approaches over voluntary ones. This could be aligned with careful reinvestment of waste levy funds into programs and alternative delivery methods to support implementation of our waste strategy.

There needs to be commitment by all stakeholders of adopting best practice management and engagement and ensuring transition and waste plans are implemented in a timely manner.

The approach taken in this strategy is founded on working collaboratively across all levels of government, industry, the social enterprise sector and the community, supported by government leading by example in areas such as sustainable procurement, minimum levels of recycled content and underpinned by targets and action plans.

The focus of this strategy, including priorities and targets, is on solid waste. However, the principles and approaches in this strategy apply to waste management across WA, regardless of the type, form or source of waste.

Minimising waste and protecting our environment is important to all West Australians and with this renewed focus I am confident we will move towards a more sustainable, low-waste, circular economy.

I look forward to sharing this journey with you.

Marcus Geisler
Waste Authority Chairman

Key strategy elements

VISION	*Western Australia will become a sustainable, low-waste, circular economy in which human health and the environment are protected from the impacts of waste.*		
OBJECTIVES	**Avoid** *Western Australians generate less waste.*	**Recover** *Western Australians recover more value and resources from waste.*	**Protect** *Western Australians protect the environment by managing waste responsibly.*
TARGETS	⊙ **2025** – 10% reduction in waste generation per capita ⊙ **2030** – 20% reduction in waste generation per capita	⊙ **2025** – Increase material recovery to 70% ⊙ **2030** – Increase material recovery to 75% ⊙ Recover energy only from residual waste	⊙ **2030** – No more than 15% of waste generated in Perth and Peel regions is landfilled. ⊙ **2030** – All waste is managed and/or disposed to better practice facilities
HEADLINE STRATEGIES	• Deliver a harmonised kerbside collection system, which includes food organics and garden organics (FOGO), in all Perth and Peel regions by 2025 – provided by local governments with funding support from the state. • Implement local government waste plans, which align local government waste planning processes with the Waste Strategy 2030. • Implement sustainable government procurement practices that encourage greater use of recycled products and support local market development. • Provide funding to promote the recovery of more value and resources from waste with an emphasis on focus materials. • Review the scope and application of the waste levy to ensure it meets the objectives of the Waste Strategy 2030. • Develop state-wide communications to support consistent messaging on waste avoidance, resource recovery and appropriate waste disposal behaviours. • Review and update data collection and reporting systems to allow waste generation, recovery and disposal performance to be assessed in a timely manner. • Undertake a strategic review of Western Australia's waste infrastructure (including landfills) by 2020 to guide future infrastructure development.		

Supporting documents

Other documents which align with or support this strategy *Waste Strategy 2030* include the:

1. Waste Strategy 2030 Action Plan
2. Waste Authority position and guidance statements
3. State Waste Infrastructure Plan
4. Annual Business Plan
5. Waste Data Strategy

Setting the direction

Waste is Australia's most rapidly increasing environmental and economic metric, according to the Australian Bureau of Statistics[2].

Western Australian's per capita waste generation rates are higher compared to other jurisdictions, while our recovery rates are lower. This poor performance partly reflects some of the unique characteristics of WA such as our geographical size, isolation from markets, vast regional and remote areas, and a heavy reliance on mineral and resource industries. Despite this, there are significant opportunities to improve our waste and recycling practices and performance.

The Australian waste sector contributes over $10 billion a year to the economy. Materials worth hundreds of millions of dollars are lost to landfill each year (ABS, 2014). High performing waste and recycling systems in which materials are recovered, reused and recycled can reduce this impact. The creation of a circular economy has the potential to harness the economic value of materials and drive investment in infrastructure and jobs.

Reducing the amount of waste disposed of to landfill can generate significant economic opportunities for the WA community. The *National Waste Policy* estimates that for each 10,000 tonnes of waste recycled, 9.2 full time equivalent jobs are created compared to only 2.8 jobs for landfill (Environment Protection and Heritage Council, 2009).

Most importantly, waste can have a significant impact on the environment and public health through greenhouse gas emissions, pollution, biodiversity loss and resource depletion (Environmental Protection Authority, 2015). Reducing the volume of waste generated is the best way to manage those risks. It is also critical that where waste cannot be recovered it is safely disposed.

The *Waste Avoidance and Resource Recovery Act 2007* requires the development of a long-term waste strategy for the state to drive continuous improvement in waste services, waste avoidance and resource recovery; and set targets for waste reduction, resource recovery and the diversion of waste from landfill.

This new waste strategy sets a direction to guide such decisions and builds on the state's previous *Western Australian Waste Strategy: Creating the Right Environment*.

It has been developed in consultation with the WA community, industry and government and builds on the *Western Australian Waste Avoidance and Resource Recovery Strategy consultation paper*. Stakeholder feedback confirmed an overall desire for WA to do more and improve its waste management performance relative to other Australian jurisdictions.

Given this need, this waste strategy has been developed to set the direction for all Western Australians and guide their decisions with regards to waste. To do this, the waste strategy includes a vision for Western Australians to strive for, which is supported by principles, objectives, targets, priorities and strategies to provide stakeholders with clear guidance on how to align their decision making with the intent of the waste strategy's vision.

The waste strategy will also be supported by an action plan that will outline specific actions to be implemented to achieve the objectives of the strategy. The action plan will be prepared by the Waste Authority in consultation with relevant State Government agencies, for consideration by the Minister for Environment. The waste strategy will be reviewed in five years, while the action plan will be reviewed on a more regular basis.

[2] Pickin and Randell, 2017.

Our starting point

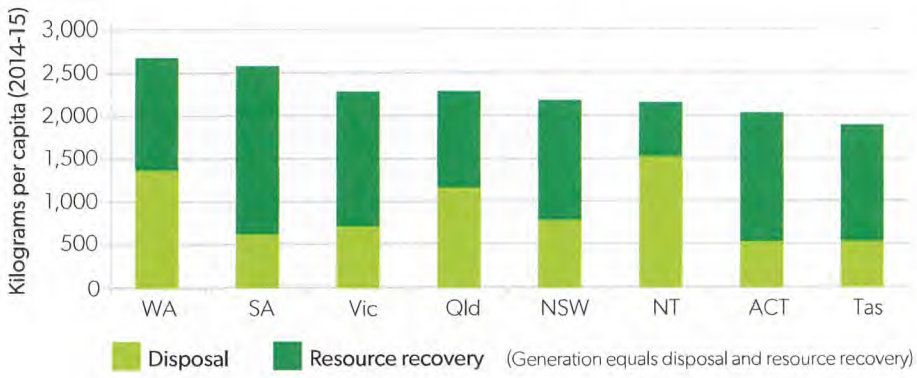
This strategy builds on Western Australia's previous waste strategy *Creating the Right Environment*, which was introduced in 2012 and achieved significant improvements in recycling, reducing waste generation, diverting construction and demolition waste, and better managing commercial and industrial waste.

The achievements were encouraging, but not enough.

In 2014-15 Western Australians:

- generated more waste than people in other Australian states and territories (2,623 kilograms per capita per annum);
- disposed of the second highest amount of waste to landfill (1,358 kilograms per capita per annum); and
- had the equal second lowest rate of resource recovery (48 per cent)[3].

Figure 1: Waste disposal and resource recovery by state (Pickin and Randell, 2017)



Western Australia has some challenging features when it comes to waste management but these cannot be an excuse. Our state is vast and located a considerable distance from waste end-markets, which can impact investment in waste and recycling infrastructure and overall recycling rates. This vastness also means it can be difficult to prevent environmental impacts from waste, through activities such as illegal dumping.

However, we have encouraging waste management results and momentum on which to build. In the nine years to 2014–15, total waste generation in Western Australia increased by about 20 per cent – or an average of 2.1 per cent per year[3]. However, our population also increased over that time and, on a per capita basis, waste generation actually decreased marginally by 0.3 per cent per year.

In terms of waste recovery over the same period, the state's overall picture also improved – waste to landfill declined and resource recovery rose. In particular:

- resource recovery rate increased from 34 per cent to 48 per cent;
- recycling tonnages rose an average of 6.8 per cent;
- the amount of waste disposed of declined by 6 per cent, by tonnage, or an average fall of 0.7 per cent per year; and
- waste disposal in WA dropped by 24 per cent on a per capita basis, or 3 per cent per year on average, which was the nation's largest fall in waste disposal per capita over the period[4].

[3] Pickin and Randell, 2017

[4] ASK Waste Management, 2017

Table 1: Changes in waste generation and landfill in Western Australia, 2010–11 and 2014–15 (ASK Waste Management, 2017)

	2010–11	2014–15	Percentage change
Generation – total	6.53 million tonnes	6.23 million tonnes	↓5%
Generation – per capita	2,764 kilograms	2,437 kilograms	↓12%
Waste to landfill	4.49 million tonnes	3.61 million tonnes	↓20%
Resource recovery	2.04 million tonnes	2.62 million tonnes	↑28%

The 2017 *Recycling Activity Review* commissioned by the Waste Authority reported generally encouraging trends in waste management in Western Australia between 2010–11 and 2014–15. Note: National and State data differ due to hazardous waste being included in national data sets and some overlap in data collection and attribution.

The journey to becoming a circular economy will not be easy and, as shown in Figure 2, there is a substantial gap between our current performance and the performance required to achieve our waste generation and material recovery targets.

Figure 2: Resource recovery performance in 2015–16 and waste strategy targets for 2020, 2025 and 2030 (ASK Waste Management 2017)

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Vision

Western Australia will become a sustainable, low-waste, circular economy in which human health and the environment are protected from the impacts of waste.

As Western Australians, we live in a unique environment and we recognise its value and importance. We share a desire to be environmentally sustainable.

To be sustainable means to be a low-waste society. Waste avoidance is a priority, which means we strive to avoid the unnecessary generation of waste.

This waste strategy recognises that some level of waste generation is unavoidable and so encourages a circular economy approach, where any waste that is generated is valued as a resource that can be reused or recycled for the benefit of the Western Australian economy.

A sustainable, circular economy also means we manage waste to protect the environment. Such management needs to occur through the entire life cycle – from design and manufacture, through to use and then disposal options consistent with the waste hierarchy.

Waste Strategy 2030 recognises that individuals, governments and industry all generate waste and can play an important role in avoiding waste, recycling and disposing of waste correctly to protect the environment. The waste industry has an important role to play in terms of maximising the recovery of resources and then managing the disposal of residual waste, or waste that cannot be practically recovered.

Objectives

This strategy includes three objectives to guide the Western Australian community and enable the development of a sustainable, low-waste and circular economy.

These objectives frame the priorities and strategies that will contribute to delivering on the vision:

Objective 1

Avoid

Western Australians generate less waste.

Objective 2

Recover

Western Australians recover more value and resources from waste.

Objective 3

Protect

Western Australians protect the environment by managing waste responsibly.

Targets

Waste Strategy 2030 provides a long-term strategy for the State for continuous improvement of waste management benchmarked against best practice.

It includes targets for waste avoidance, resource recovery and environmental protection, including the diversion of waste disposed to landfill.

Under each objective, high-level targets have been set for the state that are Specific, Measurable, Achievable, Relevant and Time-bound (SMART).

These targets will support our move towards becoming a sustainable, low-waste and circular economy and allow progress to be monitored.

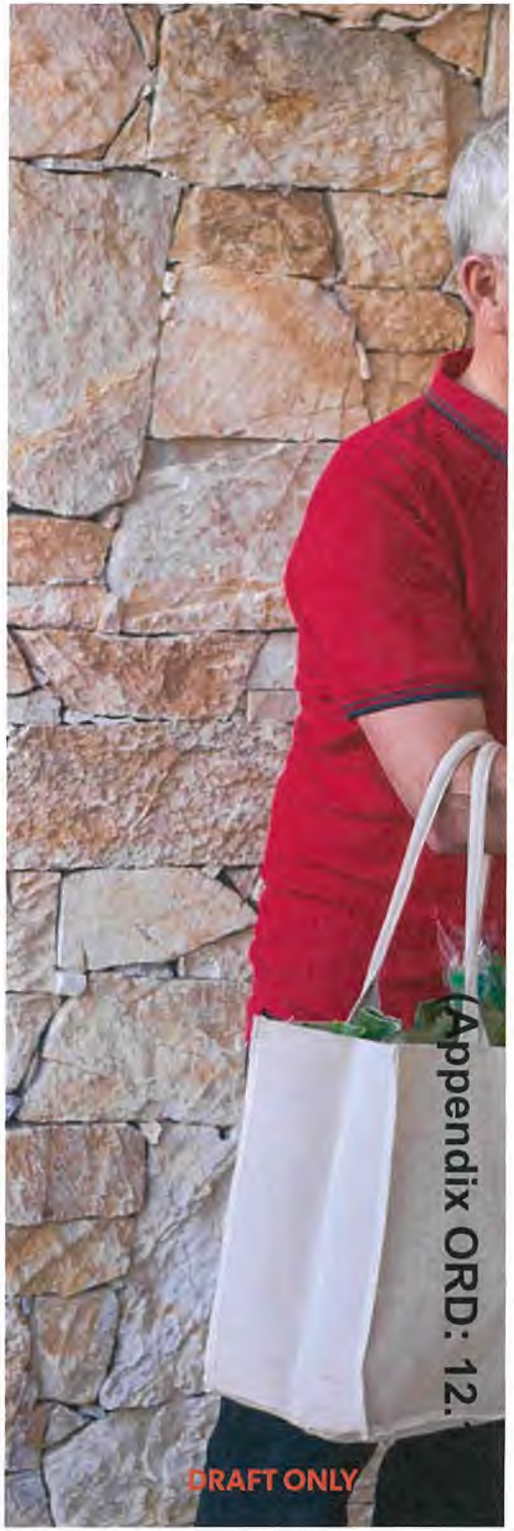
Establishing baseline data is an ongoing challenge in waste management and ensuring data is provided by key sources is an important focus of this strategy.

Improved data collection and analysis will better enable the measurement and evaluation of waste management programs and initiatives. In turn, we will be able to ensure funding and other resources are directed where they are most needed and can be most effective.

For the purposes of this strategy, comparisons are made with 2014–15 national data which represent the latest figures available during the consultation and development of the strategy.

Overall objectives and state targets

Avoid	Recover	Protect
Western Australians generate less waste.	*Western Australians recover more value and resources from waste.*	*Western Australians protect the environment by managing waste responsibly.*
⊙ **2025** – 10% reduction in waste generation per capita ⊙ **2030** – 20% reduction in waste generation per capita	⊙ **2025** – Increase material recovery to 70% ⊙ **2030** – Increase material recovery to 75% ⊙ **2020** – Recover energy only from residual waste	⊙ **2030** – No more than 15% of waste generated in Perth and Peel regions is landfilled ⊙ **2030** – All waste is managed and/or disposed to better practice facilities



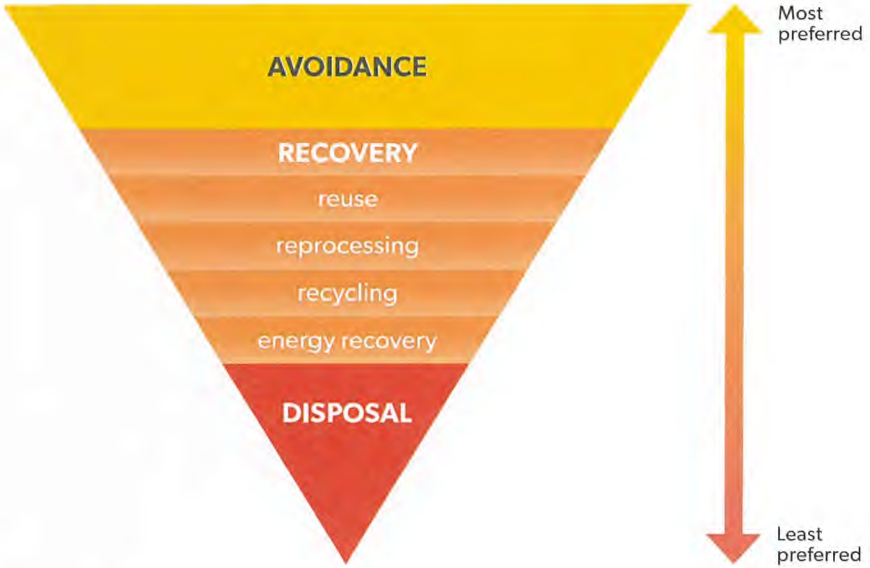
Guiding concepts

Waste hierarchy

Waste Strategy 2030 applies the waste hierarchy, which is a widely accepted decision making tool which is set out in the *Waste Avoidance and Resource Recovery Act 2007*. The waste hierarchy ranks waste management options in order of their general environmental desirability. The waste hierarchy is used alongside other tools (including economic, social and environmental assessment tools) to inform decision making.

Waste avoidance is the most preferred option in the hierarchy.

Figure 1: Waste hierarchy



Resource recovery options recover value from materials, thereby offsetting the environmental impacts of extracting and processing raw materials. Energy recovery is the least preferred recovery option.

Disposal is the least preferred option. Disposal generally recovers the least value from materials and delivers the least environmental benefit.

Circular economy

A circular economy builds on long-standing sustainability concepts, including life cycle thinking and resource efficiency, and it complements the waste hierarchy. A circular economy refers to the flow of both materials and energy – it moves away from the linear 'take, make, use and dispose' model to one which keeps materials and energy circulating in the economy for as long as possible.

A circular economy presents opportunities for increased local recycling activity. Local solutions create local jobs, and minimise the costs and impacts of unnecessary transport.

Local solutions are particularly important in a state as large as WA where access to markets is limited, and transport costs and impacts are high. WA has an opportunity to benefit from greater local recycling activity. If local recycling options are not available, solutions within Australia will be preferred.

Figure 3: Current waste approach versus circular economy

Current approach	Circular economy
	
Linear flow of materials – 'take, make, use and dispose' model.	Circular flow of materials – materials sorted and retained in the economy for as long as possible.
Limited use of renewable materials and energy.	Preference for renewable materials and energy.
Significant volumes of materials disposed of and lost to the economy. Loss of embodied materials, energy and water.	Materials recovered as high up the waste hierarchy as possible. Embodied materials, energy and water retained in the economy. Organic materials re-enter and regenerate the environment safely (for example, as compost).
Materials managed locally and globally.	Preference to manage materials locally to reduce the costs and impacts of transport, and to provide local employment and investment opportunities.
Economic value of materials, employment and investment not fully accounted for.	Economic value of materials, employment and investment accounted for.
Limited focus on life cycle thinking.	Products designed and manufactured to minimise environmental impact through whole of life.

Behaviour change – knowledge, enabling infrastructure, incentives

Building on the Western Australian Waste Strategy: *Creating the Right Environment* (2012), *Waste Strategy 2030* aims to change behaviour through a combination of strategies grouped around knowledge, enabling infrastructure and incentives.

Knowledge plays an important role in getting individuals and organisations started on behaviour change, but it is only a start. Knowledge needs to be complemented with the incentives and practical support individuals and organisations need to act on their decision to change behaviours.

Access to appropriate enabling infrastructure is critical in allowing individuals and organisations to engage with waste management options to improve their effectiveness and efficiency. Enabling infrastructure includes the physical facilities necessary to manage waste, as well as the organisational structures of government and legislation applying to individuals and organisations.

Appropriate knowledge and enabling infrastructure can assist in removing barriers to behaviour change, and incentives can provide a driving force for change. Incentives can be positive, such as funding, or negative, such as penalties and compliance actions.

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Our principles

Five key principles, aligned with legislation, guide the thinking behind *Waste Strategy 2030* and will drive future decision making.

Shared responsibility and partnership – owning your impact

The state's environmental resources belong to all Western Australians and we all have a role to play in protecting them. The State Government will lead by example by working collaboratively with the community, industry and governments to improve waste management outcomes.

We will support product stewardship and extended producer responsibility as part of our approach to shared responsibility.

Innovation and growth

Western Australia will encourage, embrace and celebrate innovation in all forms that enables and expands our waste management capacity and know-how.

Better practice

Western Australians will pursue better practice approaches in waste management that take into account the full costs, benefits and impacts of waste management decisions. We will stay abreast of national and international best practice and responsibly measure, evaluate and benchmark our own performance against it. When better practice waste management is promoted by State Government, stakeholders will adjust practices to meet or exceed this new benchmark.

Waste as a resource

Western Australians will adopt and implement the waste hierarchy, avoiding the generation of waste where possible, maximising the recovery of waste that is generated, and protecting the environment from the impacts of disposal.

Intergenerational equity

Western Australians will make waste management decisions which ensure the health, diversity and productivity of our environment is maintained or enhanced for the benefit of future generations.

Our approach

Using your influence – owning your impact

As individuals, we make decisions in different roles and have different spheres of influence when avoiding and recovering waste and also when protecting the environment from the impacts of disposal.

In our different spheres of influence we can have a greater or lesser impact on what resources or materials are used, how long they stay in circulation, what waste is generated, what resources are recovered and, ultimately, the method of disposal and the impact that has on our environment.

An individual or single household can make positive choices to contribute to the circular economy. When those same individuals act collectively, in our neighbourhoods, school and community groups, they can make an even greater difference. In their workplaces, making decisions about how they operate and make purchasing choices, for example, that contribute to the circular economy or influence industry and government.

As manufacturers, industry can make significant contributions to the circular economy through shifts to more sustainable design and manufacturing methods, and enabling greater resource recovery. As waste managers, the sector can innovate to improve waste management outcomes and better protect the environment.

Local, State and Commonwealth governments can influence, educate and inform – and can also be significant consumers whose purchasing decisions and procurement policies can have very positive impacts and influence. They have important legislative and regulatory roles and develop and implement strategies. Australia is also part of global action on waste management.

Local solutions and markets

Waste Strategy 2030 places a focus on identifying and prioritising local market solutions for those recyclable materials traditionally exported from the state. Local markets for large volume wastes, such as construction and demolition waste and organic waste lend themselves to being managed close to the source of generation for economic and environmental reasons. This is an example of the circular economy approach in action, supporting local innovation and local jobs.

For other priority materials such as plastics, it is not as straightforward to identify local reuse options across the state that make sense locally. This strategy places an increased focus on promoting procurement decisions that preference local markets and play a role in supporting the development of a remanufacturing industry within Western Australia, along with the employment and investment it can bring to the state.

Attracting investment into local reuse options requires a degree of certainty which has not been present under standard market conditions in Western Australia. This will rely on procurement decisions recognising the benefits that local reprocessing, and the use of products made locally from recycled materials, can offer compared to national or international export options.

Waste generators and waste managers

Waste Strategy 2030 recognises the roles that different individuals and organisations have in generating and managing waste. This strategy recognises entities that are primarily generators of waste (community, local and state government, and industry), and entities that are primarily managers of waste (the waste industry, including private industry and local government).

This approach allows individual strategies to better target certain groups to help avoid, recover and protect the environment from the impacts of waste. For example, community members can make better purchasing decisions with more knowledge and information, and can influence industry in its packaging and production decisions with the choices they make; industry can make decisions about more sustainable design and production of goods; while waste managers can embrace technology and innovation to achieve improved waste management practices.

Waste streams

Consistent with other jurisdictions, solid waste will continue to be categorised for the purpose of measurement and comparison against targets in the following three streams:

- **Municipal solid waste (MSW):** primarily waste collected from households and local governments through waste and recycling collections.
- **Commercial and industrial (C&I) waste:** waste that is produced by institutions and businesses. It includes waste from schools, restaurants, offices, retail and wholesale businesses and industries, including manufacturing.

- **Construction and demolition (C&D) waste**: waste produced by demolition and building activities, including road and rail construction and maintenance, and excavation of land associated with construction activities.

These waste stream descriptions are consistent with the previous Western Australian Waste Strategy (2012), and are consistent with the way Australian jurisdictions categorise and report on waste and recycling performance. The stream descriptions are carried forward to *Waste Strategy 2030* from the previous strategy to maintain continuity and enable waste and recycling data to be effectively benchmarked against other jurisdictions.

National context

Western Australia contributes to national strategies aimed at increasing the recovery of materials from waste, including:

- The *National Waste Policy: Less waste, more resources and the Product Stewardship Act 2011* support national approaches to problem wastes such as televisions, computers, paint, tyres and packaging.
- The Australian Packaging Covenant and the Environment Protection (Used Packaging Material) Measure are national programs aimed at reducing generation and encouraging the reuse and recycling of used packaging materials.

Our roles and responsibilities

Collective responsibility – waste is everybody's business

All Western Australians generate waste, and while there are some businesses that manage our waste for us, we can all take a bit more responsibility for better managing the impacts of our own waste. Whether large or small, waste is generated by households, schools, workplaces, local government authorities, government departments, businesses and industry in large cities and remote towns around our vast state.

As a collective issue, waste demands a collective solution. To achieve this strategy's objectives and targets, a model of collective, shared responsibility and action must be adopted.

State Government will work collaboratively with all stakeholders to guide and develop collective policies and solutions. These solutions will be founded in behavioural change campaigns and leading industry policy and practices – starting from within, through leadership in government activities that minimise waste, such as procurement policies and disposal processes.

For local governments and industry, the collective partnership approach will mean adopting best practice approaches to waste minimisation, resource recovery and appropriate waste management.

For businesses, it may mean expanding recycling programs or reviewing outdated practices and policies to reduce waste impacts. For waste managers, it will mean embracing innovation, new technologies and best practice performance in waste management. For the Western Australian community, it will mean being informed about the impact different decisions can make on waste contributions and adopting positive waste behaviours.

As every individual and group contributes to the waste problem, everybody will contribute to the solution in a range of different roles and ways:

- **Commonwealth Government** can help influence outcomes through national waste legislation, strategies and policy frameworks that fulfil obligations under international agreements. The Commonwealth Government will continue to manage and monitor compliance with international conventions, administer the *Product Stewardship Act 2011* and related schemes, and work with jurisdictions to identify and address issues that warrant nationally consistent approaches. It will also establish forums for cross jurisdictional collaboration to improve national waste policy outcomes.
- **State Government** can influence outcomes through its policies and programs, but also generates waste through its operations. As the "system steward" State Government will provide waste management leadership. It will influence waste behaviours through legislation, regulation, policies and programs that align with national approaches. Through engagement and collaboration, the government will create an environment that encourages community to adopt positive behaviour change and businesses to invest and innovate in the waste and recycling sector to move Western Australia towards becoming a circular economy. Agencies will also lead by example by committing to actions and targets in this strategy and reporting on their performance to contribute to its delivery.
- **Waste Authority** can influence outcomes through its programs. Established under the *Waste Avoidance and Resource Recovery Act 2007*, the authority will provide waste management advice to Government and waste management leadership to the community. It will lead the delivery of this strategy by coordinating stakeholder commitment and collaboration on strategies, administering the Waste Avoidance and Resource Recovery Account (fund), publishing position statements, and preparing annual business plan objectives, priorities and programs that align with this waste strategy.
- **Local governments and regional councils** are primarily waste managers that provide household waste collection and recycling services, manage and operate landfill sites, and deliver education and awareness programs. Local governments and regional councils will also provide information, infrastructure and incentives that encourage behaviour change and they will plan for the management of waste within their districts. They will identify local, fit-for-purpose solutions that align with this strategy and support a move towards becoming a circular economy. Local governments also generate waste resulting from the range of services provided to the community and can influence purchasing and practices to increase avoidance and recovery and maximise protection of the environment.
- **Business and industry** are primarily waste generators that can make decisions to reduce the generation of waste (e.g. by using reduced packaging) and increase recyclability. The business community often deals with large volumes of waste, as well as

harmful types of waste, which requires responsible management.

- **Waste industry** is primarily the manager of waste and is responsible for waste management services including collection, sorting, processing (i.e. reuse or safe disposal). Waste managers can also play a key role in providing information to the community. The waste industry will be relied on to make informed infrastructure and technology investment decisions that meet waste and recycling market needs and move the state toward becoming a circular economy.
- **Community, individuals and households** are primarily waste generators who make decisions about purchasing and waste disposal. The community has a key role to play to avoid waste and then properly recover and manage waste once it is generated. Decisions by these individuals and groups regarding the purchasing of products or services can have a significant influence on the behaviour of many other entities.

Opportunities and focus materials

Opportunities to avoid and recover waste and protect the environment through its responsible management exist for all materials and arise in many different situations. Even the smallest changes in behaviour at a personal level contribute to overall improvements in waste outcomes.

This strategy also identifies focus materials which will guide an emphasis on actions and measurement going forward. Significant improvements will need to be made for each of these focus materials if we are to meet the targets in Waste Strategy 2030.

Construction and demolition waste

Construction and demolition (C&D) waste makes up around 50 per cent of Western Australia's waste stream, and represents a significant opportunity for waste avoidance and material recovery.

As a waste generator, the construction industry can play a role in avoiding the amount of waste generated – for example through more efficient building processes – while waste managers can maximise recovery of waste that is generated.

Organics: food organics and garden organics

Organic material, including food waste, represents nearly 20 per cent of material recovered for recycling. The National Food Waste Strategy estimates that over 5.3 million tonnes of food that is intended for human consumption is wasted from households and the commercial and industrial sectors each year. Food waste disposed to landfill generates greenhouse gases, reduces landfill capacity, and represents a loss of valuable organic material which could otherwise be recovered for productive use.

Metals: steel, non-ferrous metals, packaging and containers

Metals represent around 20 per cent of material recovered for recycling by weight. Metals are a high value commodity with significant embodied energy. While recovery rates are relatively high compared to other materials, it is important to ensure these materials are only used where necessary and that as much value and embodied energy as possible is recovered from them.

Paper and cardboard: office paper, newspaper and magazines

Paper and cardboard represent around 10 per cent of material recovered for recycling. Paper and cardboard is a high value commodity. When disposed to landfill, paper and cardboard generates greenhouse emissions and represents a loss of economic value.

Glass: packaging and containers

Glass packaging and containers contain significant embodied energy which is lost if disposed to landfill. Glass that is inappropriately disposed (littered or dumped) can also present direct risks and impacts to the environment and human health.

Plastics: packaging and containers

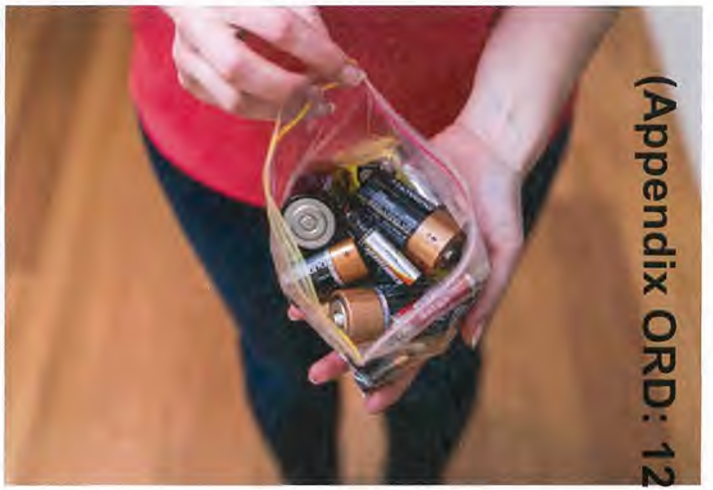
Plastic makes up a significant proportion of packaging materials in our waste stream. There are significant opportunities to avoid plastics, and in particular, single use plastics. Plastic is a high value commodity, particularly where contamination rates are low. Disposal to landfill represents an economic loss, and inappropriate disposal into the environment (litter and dumping) can result in significant harm to the environment and wildlife.

Textiles: clothing and other fabric-based materials

Textiles contain valuable materials and significant embodied energy. When disposed to landfill or illegally dumped, textiles represent a loss of resources and can negatively impact the environment.

Hazardous waste

Hazardous waste is described as unwanted products that are corrosive, flammable, toxic or reactive and present a potential risk to human health and the environment. Hazardous waste represents only a small percentage of the total waste stream, however it presents significant risks if not well managed. Opportunities exist to avoid hazardous waste through consumer purchasing decisions, and collect hazardous waste for recovery or safe disposal using best practice service infrastructure.



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Our objectives, targets and strategies

Objective 1: Avoid

Western Australians generate less waste

The waste hierarchy places waste avoidance at the forefront of approaches for managing waste. This waste strategy reflects that priority and recognises that reducing the amount of waste generated in our state requires significant and sustained behaviour change by government, industry and households if this objective is to be achieved.

National data indicate that Western Australians currently generate more waste per capita than the national average and that generation per capita has remained static between 2010–11 and 2014–15. This is in spite of past efforts to reduce waste generation and it suggests that reducing our generation rate will be very challenging.

This waste strategy first aims to close the gap between our current generation rate and the national average. Given our unique characteristics relative to other jurisdictions (particularly in relation to our geography and economy), reducing our generation of waste to this level will be challenging, but is achievable. Once achieved, our per capita generation rates can then be benchmarked against the nation's best performing jurisdictions.

Waste avoidance is driven in a large part by purchasing behaviour; it relies on high levels of awareness and motivation by consumers, both individuals and organisations, about how to reduce the impacts of purchasing decisions.

Education and incentives are critical to increase awareness of waste avoidance and to support waste avoidance behaviours.

Waste avoidance can also be pursued through the product design and manufacturing phase. Industry has an opportunity to reduce the amount of material used in products to avoid generating waste, often in response to consumer demand. For example, there are significant opportunities across the packaging sector to avoid some wastes altogether or to minimise their use.

AVOID TARGETS

- 2025 – Reduction in waste generation per capita by 10% *(from 2014/15 generation rate)*
- 2030 – Reduction in waste generation per capita by 20% *(from 2014/15 generation rate)*

Waste generators		Waste managers*
Community	**Government and industry**	**Waste industry**
⊙ **2025** – Reduction in MSW generation per capita by 5% ⊙ **2030** – Reduction in MSW generation per capita by 10%	⊙ Reduction in C&D waste generation per capita by 15% by **2025**, 30% by 2030 ⊙ Reduction in C&I waste generation per capita by 5% by **2025**, 10% by **2030**	⊙ **2030** – All waste is managed and/or disposed using better practice approaches

* Includes local government, private industry and state entities.

Focus materials

Achieving the avoidance targets will require an emphasis on the waste materials that, by weight, currently make up more than 90 per cent of the waste Western Australian's generate:

- **Construction and demolition materials:** concrete, asphalt, rubble, bricks, sand and clean fill
- **Organics:** food organics and garden organics
- **Metals:** steel, non-ferrous metals, packaging and containers
- **Paper and cardboard:** office paper, newspaper and magazines
- **Glass:** packaging and containers
- **Plastics:** packaging and containers
- **Textiles:** clothing and other fabric-based materials

Table 2: Avoid strategies

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	**Lead stakeholder**	**Community**	**Local government**	**State Government**	**Industry**	**Waste industry**	**#**
KNOWLEDGE	Coordinate consistent state-wide engagement and education on waste avoidance behaviours with an emphasis on focus materials.	State Government	✓	✓	✓	✓	✓	1
	Investigate, develop and publish, in collaboration with stakeholders, locally relevant actions for reducing waste generation with an emphasis on focus materials.	Waste Authority	✓	✓		✓	✓	2
	Lead collaboration between State Government agencies on actions that reduce the waste generation with an emphasis on focus materials.	State Government		✓	✓			3
	Coordinate communications and education that leads to food organics and garden organics waste reduction behaviour change.	Waste Authority	✓	✓	✓	✓	✓	4
	Collaborate with decision-makers and opinion leaders to explore opportunities arising from circular economy approaches and communicate them publicly.	Waste Authority		✓	✓	✓	✓	5
ENABLING INFRASTRUCTURE	Develop mechanisms and platforms that enable the community to adopt avoidance behaviours, and explore reuse and low-waste alternatives.	State Government	✓	✓	✓			6
INCENTIVES	Provide support to community, government and industry initiatives that lead to waste avoidance and contribute to waste strategy targets with an emphasis on focus materials.	State Government	✓	✓	✓	✓	✓	7
	Introduce regulations to prevent unnecessary waste generation.	State Government	✓	✓	✓	✓		8

* Includes local government, private industry and state entities.


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Objective 2: Recover

Western Australians recover more value and resources from waste

Where waste generation is unavoidable, efforts should be made to recover more value and resources from waste. Consistent with the waste hierarchy and circular economy approaches, material recovery is preferred over energy recovery. Energy recovery is preferable to landfill disposal but should only be applied to residual waste once better practice source separation approaches have been exhausted.

Waste Strategy 2030 supports the recovery of more valuable resources from the waste stream by applying a combination of strategies relating to knowledge, enabling infrastructure and incentives to encourage behaviour change by waste generators and waste managers.

RECOVER TARGETS

- 2025 – Increase material recovery to 70%
- 2025 – All local governments in the Perth and Peel regions provide harmonised kerbside collection systems that include FOGO
- 2030 – Increase material recovery to 75%
- Recover energy only from residual waste

Waste generators		Waste managers*
Community	**Government and industry**	**Waste industry**
2020 – Increase MSW material recovery to 65% in the Perth and Peel regions, 50% in major regional centres 2025 – Increase MSW recovery to 67% in the Perth and Peel regions, 55% in major regional centres 2030 – Increase MSW material recovery to 70% in the Perth and Peel regions, 60% in major regional centres	C&I sector – Increase material recovery to 70% by **2020**, 75% by **2025**, 80% by **2030** C&D sector – Increase material recovery to 75% by **2020**, 77% by **2025**, 80% by **2030**	2030 – All waste facilities adopt resource recovery better practice

* Includes local government, private industry and state entities.

Focus materials

In working towards these targets, this strategy focuses on the reuse, reprocessing and recycling of the following materials that present the greatest potential for increased recovery:

- **Construction and demolition materials:** concrete, asphalt, rubble, bricks, sand and clean fill
- **Organics:** food organics and garden organics (FOGO)
- **Metals:** steel, non-ferrous metals, packaging and containers
- **Paper and cardboard:** office paper, newspaper and magazines
- **Plastics:** packaging and containers

These focus materials reflect overall state priorities, however, it will be appropriate to consider local circumstances to increase recovery in different parts of Western Australia, and particularly between metropolitan and non-metropolitan areas. *Waste Strategy 2030* encourages the adoption of solutions that reflect local circumstances and contribute to the overarching targets.

Just as local approaches based on local circumstances can lead to unique solutions, consistent services where similar conditions exist can lead to more efficient service delivery. Consistency in the provision of kerbside services to households in urbanised areas is an example of where consistent systems, including three bin food organics and garden organics (FOGO) systems, can improve messaging to the community about how to recycle effectively and lead to better practice outcomes across large urbanised populations. Consistent collections also provide opportunities for service providers to establish processing options for clean and consistent streams of materials, which can reduce costs and improve product quality and therefore access to markets.

Energy recovery

Resource recovery includes the recovery of energy from waste. However, energy recovery is considered to be the least preferred of all resource recovery options in the waste hierarchy as it merely releases the energy embodied but does not preserve the material for reuse. For this reason, the waste strategy identifies that only residual waste (waste which remains following the application of better practice source separation and recycling systems) is to be used for energy recovery. The targets in this strategy reflect the outcomes of better practice approaches applied to the MSW, C&I and C&D waste streams. Where recovery systems applied to these streams are achieving target levels, the remaining materials are considered to be residual wastes for the purpose of this strategy.

Table 3: Recover strategies

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	**Lead stakeholder**	**Community**	**Local government**	**State Government**	**Industry**	**Waste industry**	**#**
KNOWLEDGE	Investigate options to recover and promote related local markets through State Government procurement actions with an emphasis on focus materials.	State Government			✓			9
	Develop better practice guidance and standards for waste-derived products to build confidence in recycled products and ensure protection of the environment.	Waste Authority	✓	✓	✓	✓	✓	10
	Maintain a communications toolkit for local government on consistent messaging for better practice kerbside service delivery.	Waste Authority	✓	✓			✓	11
	Develop education and engagement resources to communicate the benefits of resource recovery and the use of recycled products, and to minimise contamination in collection systems.	Waste Authority	✓	✓	✓	✓	✓	12
	Develop and publish better practice guidance to support increases in recovery with an emphasis on focus materials.	Waste Authority	✓	✓	✓	✓	✓	13
	Identify and implement options for collaboration between industry and the State Government to support market development and recovery with an emphasis on focus materials.	Waste Authority			✓	✓	✓	14
	Investigate and improve reporting on material that is reused (as distinct from recycled) to better monitor the state's move toward becoming a circular economy.	State Government	✓	✓	✓	✓	✓	15
ENABLING INFRASTRUCTURE	Establish mechanisms, including funding approaches to support investments in local infrastructure for recovery with an emphasis on focus materials.	State Government					✓	16

* Includes local government, private industry and state entities.

Table 3: Recover strategies continued

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	**Lead stakeholder**	**Community**	**Local government**	**State Government**	**Industry**	**Waste industry**	**#**
INCENTIVES	Provide funding to local governments to introduce better practice services and extend the Better Bins program to include FOGO (food organics and garden organics services).	Waste Authority	✓	✓			✓	17
	Provide funding to promote the use of priority recycled products and support the establishment of local markets with an emphasis on focus materials.	State Government		✓	✓	✓	✓	18
	Support community, government and industry initiatives that promote resource recovery in the Perth and Peel regions, major regional centres and remote areas through grant programs.	State Government	✓	✓	✓	✓	✓	19
	Develop a legislative framework to encourage the use of waste derived materials, including product specifications, to build confidence in recycled products, increase their demand and develop relevant markets while protecting the environment.	State Government		✓	✓	✓	✓	20
	Implement measures and policies that support sustainable government procurement practices and outcomes that encourage greater use of recycled products support local market development.	State Government		✓	✓	✓		21

* Includes local government, private industry and state entities.

Objective 3: Protect

Western Australians protect the environment by managing waste responsibly

The transport, storage, processing and disposal of waste all have the potential to directly impact the environment.

Certain wastes, such as hazardous materials or materials that are commonly littered or dumped, can also pose significant risks to public health and the environment. Poorly managed waste infrastructure (including landfills and recycling facilities) and services, as well as adverse waste behaviours, all increase the risk of negative impacts on public health and the Western Australian environment.

In the event waste cannot be avoided, it is important that waste management systems – including recycling and disposal (landfill) facilities – protect the environment from the negative impacts of waste by adopting better practice.

Litter and illegal dumping can significantly damage our environment. It is important that waste enters the correct waste management system so that it can be properly managed by better practice facilities, and is not littered or dumped in the environment.

PROTECT TARGETS		
⊙ 2030 – No more than 15% of Perth and Peel regions' residual waste is disposed to landfill ⊙ 2030 – All waste is managed by and/or disposed to better practice facilities		
Waste generators		**Waste managers***
Community	**Government and industry**	**Waste industry**
⊙ **2030** – Move towards zero illegal dumping ⊙ **2030** – Move towards zero littering	⊙ **2030** – Move towards zero illegal dumping	⊙ **2030** – No more than 15% of Perth and Peel regions' residual waste is disposed to landfill ⊙ **2030** – All waste facilities adopt environmental protection better practice

* Includes local government, private industry and state entities.

Priority areas

In working towards achieving these targets, Western Australia should focus on behaviours and materials that provide the greatest potential to protect the environment including:

- the transport, storage, processing and disposal of waste;
- problem wastes, including hazardous materials;
- poorly managed waste infrastructure, including landfills, recycling facilities and services;
- taking action early in a waste material's life cycle; and
- giving priority to reflect the risk posed by a waste material.

National priorities

The management of some types of waste require an international approach. Initiatives that are the responsibility of the Commonwealth Government and to which WA contributes include the Basel Convention, an international treaty to reduce the movement of hazardous waste between countries with a view to protecting public health and the environment, and the Minamata Convention on Mercury, a global treaty to protect public health and the environment from the adverse effects of mercury.

Table 4: Protect strategies

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	**Lead stakeholder**	**Community**	**Local government**	**State Government**	**Industry**	**Waste industry**	**#**
KNOWLEDGE	Identify and collect required data to monitor illegal dumping and allow better targeted monitoring and enforcement.	State Government		✓	✓		✓	23
	Deliver a community engagement and education campaign to raise awareness of illegal dumping and its impacts.	State Government	✓	✓	✓	✓		24
	Investigate, document and publish options for avoiding waste plastic.	Waste Authority	✓	✓	✓	✓		25
	Review and report on approaches to the management of hazardous waste including controlled and liquid waste.	State Government				✓	✓	26
	Assess existing recovery facility and landfill siting and management practices and publish information to guide achievement of better practice approaches.	Waste Authority					✓	27
ENABLING INFRASTRUCTURE	Work with land owners and managers to build their capacity to tackle illegal dumping.	State Government	✓	✓	✓	✓		28
	Investigate and report on the role of funding approaches to drive the uptake of better practice approaches at waste management facilities.	Waste Authority		✓			✓	29
INCENTIVES	Support local governments to safely collect and manage hazardous materials generated by households that present a significant risk to public health and the environment.	State Government	✓	✓			✓	30
	Provide relevant funding and guidance to prevent the illegal dumping of waste at charitable recycler waste collection sites.	State Government					✓	31

* Includes local government, private industry and state entities.

Table 4: Protect strategies continued

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	**Lead stakeholder**	**Community**	**Local government**	**State Government**	**Industry**	**Waste industry**	**#**
INCENTIVES	Implement the litter prevention strategy to reduce littering and manage its impacts.	Keep Australia Beautiful Council	✓	✓	✓	✓		32
	Detect, investigate and prosecute illegal dumping.	State Government	✓	✓	✓	✓		33
	Review and update the regulatory framework for waste to ensure it is appropriate and reduces the environmental impacts and risks from waste management.	State Government					✓	34
	Revise waste classifications and definitions to reflect current knowledge to ensure waste materials are managed according to their risk and are treated and/or disposed of appropriately.	State Government					✓	35
	Develop and revise legislative frameworks to encourage the use of waste derived materials and build confidence in recycled products.	State Government	✓	✓	✓	✓		36

* Includes local government, private industry and state entities.

Foundation strategies

that apply to multiple objectives

Waste Strategy 2030 includes strategies which support multiple objectives and underpin the delivery of this waste strategy. These are referred to as foundation strategies.

Foundation strategies include:

- information and data – to provide high quality information to the community, government and industry to inform decision making.
- regulation and policy – to provide a level playing field and deliver efficient and effective waste management outcomes.
- education – to underpin behaviour change approaches for avoid, recover and protect, for waste generators and waste managers.
- planning – to provide support and guidance for waste services planning as well as infrastructure and land use planning.

The range of strategies, both new and ongoing, that will allow Western Australians to achieve outcomes against all three objectives of the waste strategy are presented below.

Table 5: Foundation strategies

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	Lead stakeholder	Community	Local government	State Government	Industry	Waste industry	#
INFORMATION AND DATA	Review and update data collection and reporting systems to allow waste generation, recovery and disposal performance to be assessed in a timely manner.	State Government		✓	✓	✓	✓	37
	Collaborate with industry to develop a data strategy that includes actions to improve waste data collection, management and reporting, and guides their implementation.	State Government Waste Authority		✓	✓	✓	✓	38
	Investigate and report on the application of the circular economy in WA, including opportunities and barriers implementation.	Waste Authority	✓	✓	✓	✓	✓	39
	Collaborate with the Commonwealth Government to develop local approaches to implementing the National Food Waste Strategy.	State Government	✓	✓	✓	✓	✓	40

* Includes local government, private industry and state entities.

Table 5: Foundation strategies continued

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	Lead stakeholder	Community	Local government	State Government	Industry	Waste industry	#
INFORMATION AND DATA	Provide support to local governments, recyclers and landfill operators for reporting under amendments to the *Waste Avoidance and Resource Recovery Regulations 2008*.	State Government		✓			✓	41
	Develop state-wide waste communications to support consistent messaging on waste avoidance, resource recovery and appropriate waste disposal behaviours.	State Government	✓	✓	✓	✓		42
ENGAGEMENT AND EDUCATION	Recognise and reward the adoption of positive behaviours, practices and innovation that contribute to reduced waste generation, increased resource recovery and protection of the environment.	Waste Authority	✓	✓	✓	✓	✓	43
REGULATION AND POLICY	Investigate options for developing a 'needs based' approach to the approval of new landfills and other waste infrastructure.	State Government					✓	44
	Contribute to national waste policy and programs aimed at waste avoidance, resource recovery and environmental protection.	State Government	✓	✓	✓	✓	✓	45
	Review the scope and application of the waste levy to ensure it meets the objectives of Waste Strategy 2030.	State Government	✓	✓	✓	✓	✓	46
	Review and revise regulations and policies to achieve a level playing field for industry which ensures entities that are compliant and apply best practice are not disadvantaged.	State Government		✓	✓	✓	✓	47

* Includes local government, private industry and state entities.

Table 5: Foundation strategies continued

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	Lead stakeholder	Community	Local government	State Government	Industry	Waste industry	#
REGULATION AND POLICY	Implement local government waste plans which align local government waste planning processes with the waste strategy.	State Government	✓	✓				48
	Lead and support initiatives that bring together agencies, local governments, industry and community to assist knowledge exchange and strategic waste planning.	Waste Authority	✓	✓	✓	✓	✓	49
PLANNING	Undertake a strategic review of Western Australia's waste infrastructure (including landfills) by 2020 to guide future infrastructure development.	State Government	✓	✓	✓	✓	✓	50

* Includes local government, private industry and state entities.

Next steps

Supporting documents

Waste Strategy 2030 Action Plan

This strategy will be supported by an action plan which outlines specific actions to be implemented to achieve the objectives of the strategy.

The action plan will be prepared by the Waste Authority in consultation with relevant State Government agencies, for consideration by the Minister for Environment.

Waste Authority Position and Guidance Statements

The Waste Authority publishes position statements from time to time. Position statements formalise the views of the Waste Authority and may be used to inform decisions relevant to the Waste Authority's role in implementing the strategy.

State Waste Infrastructure Plan

A state waste infrastructure plan will be developed together with key stakeholders to guide the planning and decision making for the establishment and maintenance of critical infrastructure. This will include the type and capacity of additional infrastructure that will be needed to meet the targets in this strategy, the areas in which infrastructure may be best located and forecast dates for when it is needed.

Annual Business Plan

The *Waste Avoidance and Resource Recovery Act 2007* (WARR Act) requires the Waste Authority to prepare a draft business plan to be submitted to the Minister each year. The business plan sets out objectives and priorities for government funding for the next five financial years, and must be consistent with this strategy.

Waste Data Strategy

A waste data strategy will guide the ongoing development of data definitions, collection mechanisms, management and reporting requirements to ensure progress on *Waste Strategy 2030* can be monitored appropriately and that any revision of approach is based on sound information.

Measuring progress

The Waste Authority will be responsible for evaluating *Waste Strategy 2030*, including progress towards objectives and targets. The Waste Authority will publish annual reports against its business plan, and coordinate reports on behalf of the Minister against the outcomes of the action plan.

Strategy updates

As Western Australia implements this waste strategy, new opportunities and priorities may be identified which may warrant a review of the scope and focus of the strategy. The *WARR Act* requires that the waste strategy be reviewed for currency at least every five years, including a full public consultation process. Minor amendments to the waste strategy can be made by the Waste Authority subject to the approval of the Minister.

Glossary

Term	Definition
Circular economy	An alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible – extracting the maximum value from them while in use, then recovering and reusing products and materials. Three core principles underpin a circular economy – design out waste and pollution; keep products and materials in use; and regenerate natural systems.
Commercial and industrial (C&I) waste	Waste produced by institutions and businesses, including schools, restaurants, offices, retail and wholesale businesses and industries, including manufacturing.
Construction and demolition (C&D) waste	Waste produced by demolition and building activities, including road and rail construction and maintenance, and excavation of land associated with construction activities.
Drop-off facility	Site where residents can bring their waste or recyclables for disposal.
Household hazardous waste	Products used in and around the home that have at least one hazardous characteristic (flammable, toxic, explosive or corrosive).
Hazardous waste	Waste that, by its characteristics, poses a threat or risk to public health, safety or the environment.
Illegal dumping	Premeditated littering where people go out of their way to dump waste in public places illegally, typically for commercial benefit or to avoid disposal fees.
Kerbside collection	A regular containerised service that collects waste from a residents' kerbside.
Litter	Waste that is left in public places and not deposited into a bin.
Litter Prevention Strategy	Litter Prevention Strategy for Western Australia 2015–2020.
Liquid waste	Wastes that are not solid or gaseous. May refer to sludges and slurries, or other liquids discharged to sewer. May also refer to waste water.
Major Regional Centre	Any WA local government not within the Perth metropolitan region or Peel region, with a population above 15,000 and within 600km (by road) of Perth. If more than one centre within a Western Australian Planning Commission planning region meets this definition, then the most populated centre is included in the first instance. Smaller centres that also meet the above criteria are included if within 15 per cent of the population of the planning region's most populated centre; or if greater than 300km from the planning region's most populated centre. This definition includes the cities of Albany, Busselton, Bunbury, Greater Geraldton and Kalgoorlie-Boulder.
Municipal solid waste (MSW)	Waste primarily collected from households and local governments through waste and recycling collections.
Organic waste	Waste materials from plant or animal sources, including garden waste, food waste, paper and cardboard.
Perth and Peel regions	The Perth region, or Perth metropolitan region, is the area defined by the Metropolitan Region Scheme. The Peel region is the area defined by the Peel Region Scheme.
Product stewardship	Product stewardship is an approach to managing the impacts of different products and materials. It acknowledges that those involved in producing, selling, using and disposing of products have a shared responsibility to ensure that those products or materials are managed in a way that reduces their impact, throughout their life cycle, on the environment and on public health and safety.
Residual waste	Waste which remains following the application of better practice source separation and recycling systems.
Resource recovery	The process of extracting materials or energy from a waste stream through re-use, reprocessing, recycling or recovering energy from waste.
Vergeside service	Local government services that collect a range of materials from the verge for recovery or disposal.
Waste avoidance	Refers to the prevention or reduction of waste generation, or the prevention or reduction of the environmental impacts (for example toxicity) of waste generation.
Waste diversion	The act of diverting a waste away from landfill for another purpose such as re-use or recycling.

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Waste Authority

Shire of Dardanup Response to the Draft Western Australia's Waste Strategy 2030

Table 1: Changes in waste generation and landfill in Western Australia, 2010–11 and 2014–15 (ASK Waste Management, 2017)

	2010–11	2014–15	Percentage change
Generation – total	6.53 million tonnes	6.23 million tonnes	↓5%
Generation – per capita	2,764 kilograms	2,437 kilograms	↓12%
Waste to landfill	4.49 million tonnes	3.61 million tonnes	↓20%
Resource recovery	2.04 million tonnes	2.62 million tonnes	↑28%

The 2017 *Recycling Activity Review* commissioned by the Waste Authority reported generally encouraging trends in waste management in Western Australia between 2010–11 and 2014–15. Note: National and State data differ due to hazardous waste being included in national data sets and some overlap in data collection and attribution.

The journey to becoming a circular economy will not be easy and, as shown in Figure 2, there is a substantial gap between our current performance and the performance required to achieve our waste generation and material recovery targets.

Figure 2: Resource recovery performance in 2015–16 and waste strategy targets for 2020, 2025 and 2030 (ASK Waste Management 2017)

Table 2: Avoid strategies

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	Lead stakeholder	Community	Local government	State Government	Industry	Waste industry	#
KNOWLEDGE	Coordinate consistent state-wide engagement and education on waste avoidance behaviours with an emphasis on focus materials.	State Government	✓	✓	✓	✓	✓	1
	Investigate, develop and publish, in collaboration with stakeholders, locally relevant actions for reducing waste generation with an emphasis on focus materials.	Waste Authority	✓	✓		✓	✓	2
	Lead collaboration between State Government agencies on actions that reduce the waste generation with an emphasis on focus materials.	State Government		✓	✓			3
	Coordinate communications and education that leads to food organics and garden organics waste reduction behaviour change.	Waste Authority	✓	✓	✓	✓	✓	4
	Collaborate with decision-makers and opinion leaders to explore opportunities arising from circular economy approaches and communicate them publicly.	Waste Authority		✓	✓	✓	✓	5
ENABLING INFRASTRUCTURE	Develop mechanisms and platforms that enable the community to adopt avoidance behaviours, and explore reuse and low-waste alternatives.	State Government	✓	✓	✓			6
INCENTIVES	Provide support to community, government and industry initiatives that lead to waste avoidance and contribute to waste strategy targets with an emphasis on focus materials.	State Government	✓	✓	✓	✓	✓	7
	Introduce regulations to prevent unnecessary waste generation.	State Government	✓	✓	✓	✓		8

* Includes local government, private industry and state entities

Table 3: Recover strategies

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	Lead stakeholder	Community	Local government	State Government	Industry	Waste industry	#
KNOWLEDGE	Investigate options to recover and promote related local markets through State Government procurement actions with an emphasis on focus materials.	State Government			✓			9
	Develop better practice guidance and standards for waste-derived products to build confidence in recycled products and ensure protection of the environment.	Waste Authority	✓	✓	✓	✓	✓	10
	Maintain a communications toolkit for local government on consistent messaging for better practice kerbside service delivery.	Waste Authority	✓	✓			✓	11
	Develop education and engagement resources to communicate the benefits of resource recovery and the use of recycled products, and to minimise contamination in collection systems.	Waste Authority	✓	✓	✓	✓	✓	12
	Develop and publish better practice guidance to support increases in recovery with an emphasis on focus materials.	Waste Authority	✓	✓	✓	✓	✓	13
	Identify and implement options for collaboration between industry and the State Government to support market development and recovery with an emphasis on focus materials.	Waste Authority			✓	✓	✓	14
	Investigate and improve reporting on material that is reused (as distinct from recycled) to better monitor the state's move toward becoming a circular economy.	State Government	✓	✓	✓	✓	✓	15
ENABLING INFRASTRUCTURE	Establish mechanisms, including funding approaches to support investments in local infrastructure for recovery with an emphasis on focus materials.	State Government					✓	16

* Includes local government, private industry and state entities

Table 3: Recover strategies continued

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	Lead stakeholder	Community	Local government	State Government	Industry	Waste industry	#
INCENTIVES	Provide funding to local governments to introduce better practice services and extend the Better Bins program to include FOGO (food organics and garden organics services).	Waste Authority	✓	✓			✓	17
	Provide funding to promote the use of priority recycled products and support the establishment of local markets with an emphasis on focus materials.	State Government		✓	✓	✓	✓	18
	Support community, government and industry initiatives that promote resource recovery in the Perth and Peel regions, major regional centres and remote areas through grant programs.	State Government	✓	✓	✓	✓	✓	19
	Develop a legislative framework to encourage the use of waste derived materials, including product specifications, to build confidence in recycled products, increase their demand and develop relevant markets while protecting the environment.	State Government		✓	✓	✓	✓	20
	Implement measures and policies that support sustainable government procurement practices and outcomes that encourage greater use of recycled products support local market development.	State Government		✓	✓	✓		21

* Includes local government, private industry and state entities

Table 4: Protect strategies

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	Lead stakeholder	Community	Local government	State Government	Industry	Waste industry	#
KNOWLEDGE	Identify and collect required data to monitor illegal dumping and allow better targeted monitoring and enforcement.	State Government		✓	✓		✓	23
	Deliver a community engagement and education campaign to raise awareness of illegal dumping and its impacts.	State Government	✓	✓	✓	✓		24
	Investigate, document and publish options for avoiding waste plastic.	Waste Authority	✓	✓	✓	✓		25
	Review and report on approaches to the management of hazardous waste including controlled and liquid waste.	State Government				✓	✓	26
	Assess existing recovery facility and landfill siting and management practices and publish information to guide achievement of better practice approaches.	Waste Authority					✓	27
ENABLING INFRASTRUCTURE	Work with land owners and managers to build their capacity to tackle illegal dumping.	State Government	✓	✓	✓	✓		28
	Investigate and report on the role of funding approaches to drive the uptake of better practice approaches at waste management facilities.	Waste Authority		✓			✓	29
INCENTIVES	Support local governments to safely collect and manage hazardous materials generated by households that present a significant risk to public health and the environment.	State Government	✓	✓			✓	30
	Provide relevant funding and guidance to prevent the illegal dumping of waste at charitable recycler waste collection sites.	State Government					✓	31

* Includes local government, private industry and state entities

Table 4: Protect strategies continued

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	Lead stakeholder	Community	Local government	State Government	Industry	Waste industry	#
INCENTIVES	Implement the litter prevention strategy to reduce littering and manage its impacts.	Keep Australia Beautiful Council	✓	✓	✓	✓		32
	Detect, investigate and prosecute illegal dumping.	State Government	✓	✓	✓	✓		33
	Review and update the regulatory framework for waste to ensure it is appropriate and reduces the environmental impacts and risks from waste management.	State Government					✓	34
	Revise waste classifications and definitions to reflect current knowledge to ensure waste materials are managed according to their risk and are treated and/or disposed of appropriately.	State Government					✓	35
	Develop and revise legislative frameworks to encourage the use of waste derived materials and build confidence in recycled products.	State Government	✓	✓	✓	✓		36

* Includes local government, private industry and state entities

Table 5: Foundation strategies

			Strategy application					
			Waste generators				Waste managers*	
	Strategy description	Lead stakeholder	Community	Local government	State Government	Industry	Waste industry	#
INFORMATION AND DATA	Review and update data collection and reporting systems to allow waste generation, recovery and disposal performance to be assessed in a timely manner.	State Government		✓	✓	✓	✓	37
	Collaborate with industry to develop a data strategy that includes actions to improve waste data collection, management and reporting, and guides their implementation.	State Government Waste Authority		✓	✓	✓	✓	38
	Investigate and report on the application of the circular economy in WA, including opportunities and barriers implementation.	Waste Authority	✓	✓	✓	✓	✓	39
	Collaborate with the Commonwealth Government to develop local approaches to implementing the National Food Waste Strategy.	State Government	✓	✓	✓	✓	✓	40

* Includes local government, private industry and state entities

Table 5: Foundation strategies continued

	Strategy description	Lead stakeholder	Strategy application: Waste generators: Community	Local government	State Government	Industry	Waste managers*: Waste industry	#
INFORMATION AND DATA	Provide support to local governments, recyclers and landfill operators for reporting under amendments to the *Waste Avoidance and Resource Recovery Regulations 2008*	State Government		✓			✓	41
	Develop state-wide waste communications to support consistent messaging on waste avoidance, resource recovery and appropriate waste disposal behaviours	State Government	✓	✓	✓	✓		42
ENGAGEMENT AND EDUCATION	Recognise and reward the adoption of positive behaviours, practices and innovation that contribute to reduced waste generation, increased resource recovery and protection of the environment	Waste Authority	✓	✓	✓	✓	✓	43
REGULATION AND POLICY	Investigate options for developing a 'needs based' approach to the approval of new landfills and other waste infrastructure	State Government					✓	44
	Contribute to national waste policy and programs aimed at waste avoidance, resource recovery and environmental protection	State Government	✓	✓	✓	✓	✓	45
	Review the scope and application of the waste levy to ensure it meets the objectives of Waste Strategy 2030	State Government	✓	✓	✓	✓	✓	46
	Review and revise regulations and policies to achieve a level playing field for industry which ensures entities that are compliant and apply best practice are not disadvantaged	State Government		✓	✓	✓	✓	47

* Includes local government, private industry and state entities

Table 5: Foundation strategies continued

	Strategy description	Lead stakeholder	Strategy application: Waste generators: Community	Local government	State Government	Industry	Waste managers*: Waste industry	#
REGULATION AND POLICY	Implement local government waste plans which align local government waste planning processes with the waste strategy	State Government	✓	✓				48
	Lead and support initiatives that bring together agencies, local governments, industry and community to assist knowledge exchange and strategic waste planning	Waste Authority	✓	✓	✓	✓	✓	49
PLANNING	Undertake a strategic review of Western Australia's waste infrastructure (including landfills) by 2020 to guide future infrastructure development	State Government	✓	✓	✓	✓	✓	50

* Includes local government, private industry and state entities

Supporting documents

Waste Strategy 2030 Action Plan

This strategy will be supported by an action plan which outlines specific actions to be implemented to achieve the objectives of the strategy.

The action plan will be prepared by the Waste Authority in consultation with relevant State Government agencies, for consideration by the Minister for Environment.

Waste Authority Position and Guidance Statements

The Waste Authority publishes position statements from time to time. Position statements formalise the views of the Waste Authority and may be used to inform decisions relevant to the Waste Authority's role in implementing the strategy.

State Waste Infrastructure Plan

A state waste infrastructure plan will be developed together with key stakeholders to guide the planning and decision making for the establishment and maintenance of critical infrastructure. This will include the type and capacity of additional infrastructure that will be needed to meet the targets in this strategy, the areas in which infrastructure may be best located and forecast dates for when it is needed.

Annual Business Plan

The *Waste Avoidance and Resource Recovery Act 2007* (WARR Act) requires the Waste Authority to prepare a draft business plan to be submitted to the Minister each year. The business plan sets out objectives and priorities for government funding for the next five financial years, and must be consistent with this strategy.

Waste Data Strategy

A waste data strategy will guide the ongoing development of data definitions, collection mechanisms, management and reporting requirements to ensure progress on *Waste Strategy 2030* can be monitored appropriately and that any revision of approach is based on sound information.

Measuring progress

The Waste Authority will be responsible for evaluating *Waste Strategy 2030*, including progress towards objectives and targets. The Waste Authority will publish annual reports against its business plan, and coordinate reports on behalf of the Minister against the outcomes of the action plan.

Strategy updates

As Western Australia implements this waste strategy, new opportunities and priorities may be identified which may warrant a review of the scope and focus of the strategy. The *WARR Act* requires that the waste strategy be reviewed for currency at least every five years, including a full public consultation process. Minor amendments to the waste strategy can be made by the Waste Authority subject to the approval of the Minister.

Draft Waste Strategy Impacts on Local Government – Shire of Dardanup			
#	**Strategy Description (Abbreviated)**	**Comment**	**Recommended Action**
1	Coordinate consistent state-wide engagement and education on waste avoidance behaviors with an emphasis on focus materials.	Led by the State Government, with cooperation with Local Government.	Support.
2	Waste Authority to work with stakeholders to develop actions to reduce waste with a focus on materials.	Led by the Waste Authority.	Support, with a variation that the Minister provide funding to assist Local Government with the implementation of waste reduction initiatives.
4	Coordinate education that leads to food organics waste reduction.	Led by Waste Authority, with reference to Strategy # 17. Objective being to have all Local Governments provide a 3rd bin system. The Shire of Dardanup community has not previously supported the 3rd bin system. It is recommended that if the State Government legislates for the 3rd bin system to be mandatory that the Shire of Dardanup lobby for the set up cost to be fully funded by the State and inform the community of how the 3rd bin system has been enforced.	Support with a condition that the capital set up costs be funded by the State Government.
8	Introduce regulations to prevent unnecessary waste generation.	This is difficult to comment on as the strategy lacks detail. Once adopted an Action Plan will be developeed, the details of the Plan are unknown. The introduction of regulations by the State Government usually equates to enforcement by Local Government. However, in this case the focus appears to be on those who generate the waste, exactly whom that is aimed at is unclear. Is it the manufacturers, retailers? Below is reference to the National Strategy to reduce food waste. Commonwealth research shows 5.3 million tonnes of food for human consumption end up in landfill (Draft Waste Strategy p22). It is unclear if # 8 includes regulating how the community is to	Not support regulations that involve shifting costs on to Local Government; and recommend a variation that responsibility for policing this strategy be that of the Waset Authority.

		reduce food waste. Diverting food waste from landfill is recognized as an easy win to reduce the amount of waste going to landfill. Is there a way to educate the community to reduce the amount of food purchased for consumption both in the domestic and commercial arena, thus reducing what ends up as waste?	
11	Maintain a communication toolkit for Local Government on consistent messaging for better practice kerbside service delivery.	Led by the Waste Authority. The education and consistent messaging is needed for the at source recycling before the waste reaches the kerbside, this is covered in Strategy # 1.	Support.
17	Provide funding to Local Government to introduce the Better Bins program, food organics and garden organics services (3rd bin system).	The funding should be for 100% of the set up costs.	Support only if the service set up costs are 100% funded by the State Government.
23	Collection of data to monitor illegal dumping.	This will require support from Local Government to collect and report the data.	Support.
24	Education campaign to raise awareness of illegal dumping and its impacts.	Such a campaign will have to be supported by Local Government at the local level.	Support.
27	Assess existing recovery facility and landfill siting and management practices and publish information to guide achievement of better practice approaches.	Led by the Waste Authority, with the responsibility landing on private providers and Local Governments to develop and maintain landfill and recovery facilities. Best practice advice has not proven to alleviate the concerns of landowners that are concerned with the impacts of waste landfill sites near their properties or near ground water supplies and conservation reserves. Note the recommended variation is unlikely to be supported as the Minister, the Department of Water and Environment Regulation and the Waste Authority are part of the decision making process to issue licenses for sites, therefore they cannot be involved in site selection and the application for approval. The comment and recommendation are made to highlight that the	A variation is recommended; being that the State Government and the Waste Authority take the lead in identifying sites, facilitating community consultation and assuring the community that better practice is to be required of operators and monitored by the Deaprtment of Water and Environment Regulation.

		commitment to better practice does not convince the community that the selected site will not have any environmental impacts; better practice is not considered a guarantee. Waste landfill sites and transfer stations are not welcome by communities whether they are living near or far, therefore there needs to be a solution that is more likely to be supported, a solution that is yet to be discovered and published.	
28	Work with landowners and managers to build their capacity to tackle illegal dumping.	Local Government as a landowner and land manager will be embedded in this process. Aside from surveillance, collecting evidence and prosecution of offenders, capacity building may be through increasing the number of officers assigned to monitoring sites, developing investigation techniques and increasing penalties to be a warning to others.	Support with a variation that the State Government resource the required increase in Local Government officers and the training of officers to investigate and prosecute illegal dumping offenders.
29	Use funding to drive the uptake of better practice approaches at waste management facilities.	Use of better practice is encouraged as is the use of funding incentives. The question is where does the funding come from? The Waste Levy is the obvious source, meaning that the metropolitan area will be funding this initiative throughout the state if this staretgy is applied state wide. See Strategy #46.	Support with a variation that states that the incentives are funded by the State Government.
30	Support Local Government to safely collect and manage hazardous waste materials generated by households that present a significant risk to public health and the environment.	Local Governments currently provide options for the public to dispose of hazardous waste. More education is required with a system that makes it easier for people to dispose of hazardous waste to improve the current level of hazardous waste finding its way into landfill and the environment. Data is required to assess how many people stockpile hazardous material on their property until they can take it to the transfer station, or a	Support and require the involvement of Local Government in investigating the options.

		designated disposal site and to identify how many people just throw the material into the general waste (requires honesty). A further question may be *"if there were a roadside pickup of hazardous material once or twice per year, would you hold your hazardous waste for that pickup?"* From a risk management view the kerbside collection of hazardous waste is highly likely to be considered too high a risk to the community and the environment. Getting hazardous waste from the household to a safe disposal place is a significant challenge and will require State Government support to achieve real change.	
31	Prevent illegal dumping at charitable recycler waste collection sites.	Many not for profit charities face significant waste disposal costs caused by persons illegally dumping their unwanted waste at these sites. Prosecution can be a deterrent, especially if the penalty is significant and if nonpayment results in a person having unpaid fines deducted from their income (a new State Government initiative yet to be adopted) or if their driver's license is cancelled. The State Government may assist this issue if the State funded CCTV for each of the not for profit sites to capture the evidence required to achieve successful prosecution.	Support with the variation that the State Government fund CCTV installations at all not for profit waste recycling collection sites.
32	Implement the litter prevention strategy to reduce littering and manage its impacts.	This strategy is led by Keep Australia Beautiful Council. Local Government support will be required to help promote and police the strategy.	Support.
33	Detect, investigate and prosecute illegal dumping.	The draft strategy suggests that this is to be led by the State Government. This is more likely to be a Local Government action unless the State directs the WA Police or the Department of Water and Environment	Support.

		to undertake this role. The Department of Biodiversity Conservation and Attractions already deal with illegal dumping of waste in Reserves under their control. Essentially it is the responsibility of all to report illegal dumping so that prosecution can be implemented by the various agencies.	
35	Review waste classifications and definitions to ensure waste is managed according to risk so it is disposed of and treated appropriately.	This refers to being a State Government lead strategy, with reference to the Waste Industry, including Local Government. Local Government needs to be involved in this review to be aware of potential changes and impacts on Local Government.	Support with Local Government being involved in the review.
37	Review data collection and reporting.	This will involve Local Governments whether operating a landfill or not. Most will have a transfer station and or a landfill, so there will be a need to be involved in the collection of data. Data will assist the decision making process.	Support.
38	As with # 37 above.	As above.	Support.
39	Investigate and report on the circular economy, including opportunities and barriers to implementation.	This will involve Local Government through the provision of data.	Support.
40	Collaborate with the Commonwealth Government to develop local approaches to implementing the National Food Waste Strategy.	This is in line with # 4 and # 17, in relation to food waste and organics. The Commonwealth research shows 5.3 million tonnes of food for human consumption ends up in landfill (Draft Waste Strategy p22). The community is responsible for identifying how food preparation can be reduced to what is needed for full consumption so that this waste can be reduced before it is purchased and subsequently thrown away.	Support.
41	Provide support to Local Government and recyclers for reporting.	Collection of data is critical to better decision making.	Support.
42	Statewide communication.	In line with the need for better education and publicity to increase community awareness of recycling and waste management generally.	Support.
44	Investigate options for developing a 'needs based'	Several years of research and discussion in the south	Support.

	approach to the approval of new landfills and other waste infrastructure.	west has established that there is a need for landfill infrastructure. A regional facility has also been acknowledged as the most cost effective environmentally friendly approach. The Draft Strategy suggests that the infrastructure should be based on 'needs'; it is difficult to imagine a Local Government or a private company wanting to establish a landfill and waste infrastructure unless they have established a 'need' given the significant time and funds that are required to create this community service. Local Government should be included in any analysis of the needs of the community to dispose of waste.	
45	Contribute to a national waste policy and program.	A nationwide approach has the potential to reveal innovations that are being developed in other states, reducing the need for WA to reinvent process and practice that is already proven.	Support.
46	Review the scope and application of the waste levy to ensure it meets the objectives of Waste Strategy 2030.	The Shire of Dardanup does not support the Waste Levy applying to Local Government outside of the Metropolitan area.	Continue to not support the application of the Waste Levy to cover country based Local Government districts, as per the submission of February 2018.
47	Review regulations to ensure industry is not disadvantaged.	All operators ought to be required to comply with the same regulations and conditions as appropriate to the environment and location of facilities.	Support.
48	Implement Local Government waste plans which align Local Government waste planning with the Waste Strategy.	Local Government will be required to prepare and implement a waste plan to align with the Waste Strategy. The Shire of Dardanup has previously recommended that the Waste Authority and the State Government develop a Statewide Waste Strategy, more particularly a strategy for the South West. If each Local Government strategy is to align with the State Waste Strategy then they will all be the same, therefore the simplest approach is for the State	Recommend a variation that recognizes Local Government as partners with the State Government in the development and implementation of the State Waste Strategy with Local Government not being required to develop a separate Waste Strategy and Waste Plan. As a partnership, it is recommended that the Minister not adopt the Western Australia's Waste Strategy 2030 until greater than 50% of Local Governments also support the Strategy.

		Government to state that the State Waste Strategy is Local Government's Strategy. The State Strategy should be aiming for what is best for all of the State; therefore, Local Government should be included as a partner in the Strategy. Requiring 142 Local Governments to separately develop a Strategy that states the same strategies, objectives and action plans is an unnecessary impost on Local Government.	
49	Lead and support initiatives that bring together agencies, Local Governments, industry and community to assist knowledge exchange and strategic waste planning.	This is a partnership approach that the Waste Authority will need to lead. Implementation of this approach aligns with the concept that the State Waste Strategy is a partnership and there is no need for each Local Government to develop a separate strategy.	Support as a partnership.
50	Undertake a strategic review of Western Australia's waste infrastructure (including landfills) by 2020 to guide future infrastructure development.	This strategy is in keeping with the approach of South West Local Governments in their endeavor to have the State Government take the lead in developing a South West Waste Strategy and assist the Local Governments with establishing a direction for the long term management of waste in the South West.	Support.

Shire of Dardanup Submission to the Draft State Waste Strategy – February 2018

The following is an extract of the Shire of Dardanup submission to the drafting of the Waste Strategy (Review) sent to the Waste Authority on the 26 February 2018. This submission was reported to Council in the Councillor Information Bulletin due to time constraints for the review.

The submission:-

Dardanup Shire is an advocate for waste to energy and has received a number of presentations from various companies, Australian and German that have developed the technology to burn domestic waste to generate electricity. We understand that the primary issue for these companies to date is that they cannot at this stage win favour from enough local governments in the South West to reach the volumes (economies of scale) needed to make the process viable.

The Shire of Dardanup strongly advocates in all considerations that the emissions from waste to energy must meet the strictest level of compliance with environmental controls.

Disposing of waste into landfill is considered to be an archaic and unsustainable way to dispose of waste. Given that the current strategy of the Waste Authority includes a target to reduce the amount of waste going to landfill, it is clear that the Authority recognises the use of landfill as unsustainable and is a potential risk to the environment.

If the new revised strategy is to maintain that objective then the State Government will need to provide financial and legislative support to ensure that reducing the tonnage going to landfill is realistic and achievable.

This is not to advocate for the landfill levy to apply to regional and rural Western Australia, raising a tax to change community behavior is not supported, is counterproductive and does not encourage sustainable long term change. Reducing waste to landfill should not be aligned with the philosophy of taxing cigarette smokers, everyone has waste and pays either through their rent or rates, whereas tax on cigarettes only impacts on those that consciously choose to smoke. Residents of our communities have no choice but to pay toward removing and managing the waste that they create.

As stated earlier, it is the volume of waste that passes through a facility that provides the economies of scale that make a process sustainable.

To achieve best practice the Government is encouraged to provide incentives for local governments to work together to create a minimal number of landfills to make processing cost effective and in so doing create further incentives to work as a collective to apply and develop best practice, including aiming for waste to energy to help create electricity and steam supply close to large industries and power users to gain even more economies of scale and to create competition into what has become an expensive energy market.

Waste processing is critical to the growth or the south west. The Bunbury Geographe area has been identified by the state to be the second City of Western Australia with a projected population of 300,000 people. The whole of the south west requires a sound and sustainable waste infrastructure plan.

The state previously embarked on the development of a state wide waste infrastructure plan.

Can you advise local government what the government's commitment is to this plan, and the how the government plans to facilitate the development of strategic waste infrastructure for the south west?

Such a plan will need to be dynamic and significant to be able to deal with sudden changes in volumes of waste and alternative waste processing technologies.

The recent without warning removal of the recycling market in China highlights the need for flexibility so that communities remain encouraged to minimize waste, to separate waste and to be able to dispose of waste preferably by waste to energy, or future recycling, leaving landfill as a last resort.

Is it the states preferred position that all local governments have their own waste processing facility, with the fall-back position for each of the 131 (country based local governments) to have a landfill site in each and every district?

Our submission is that the Waste Authority be required by the State Government to: -

- Advise local government what the government's commitment is to the south west waste infrastructure plan?
- Advise how the government plans to facilitate the development of strategic waste infrastructure for the south west?
- Request that the Waste Authority work together with local government to create regional waste processing facilities
- Assist local governments to identify suitable land in regions for shared waste processing facilities
- Work with local governments to prepare the required business case and environmental approvals for each identified strategic regional site

- Identify suitable sites for waste processing in collaboration with local government and or private enterprise
- Create an Australia wide policy for manufacturing and packaging to use either combustible products that create no contaminants when incinerated or are able to be recycled with minimal effort, or alternatively break down in landfill to leave no remnant or potential harm to the environment
- Investigate and establish best practice waste to energy systems that can be scaled to be able to increase capacity as volumes increase
- Use the combined expertise, knowledge and technology that is held by the Department of Water and Environment Regulation, the Waste Authority, the Department of Lands and Planning, Landgate and the Department of Health to assist local governments to identify and establish preferred sites and best practice in waste management throughout the state
- Assist local governments in the community consultation process with the electors to ensure that factual information is disseminated
- Commit to best practice in waste management as the highest priority.

(Appendix ORD: 12.4A)

National Best Management Practice for Beekeeping in the Australian Environment

The Australian Honey Bee Industry Council

www.honeybee.org.au

Industry Partnerships Program – Action Partnership Grants

Part of the Australian Government's Agriculture – Advancing Australia Package

Australian Government

Department of Agriculture, Fisheries and Forestry

NSW DEPARTMENT OF PRIMARY INDUSTRIES

1st Edition – December 2007

Project conducted on behalf of AHBIC

Principle investigator
Dr Doug Somerville
Technical Specialist Honey Bees
NSW DPI

Contents

"Bees play a vital role in maintaining the production and growth of the range native and non-native plants found across Australia today."

Foreword

In times of drought, uncertain climate forecasts and tough markets, farmers are relying heavily on quality pollination services to increase their productivity.

To provide those services, the bee industry needs to safeguard its access to public native forests. The Australian Honey Bee Industry Council has been working closely with bee keepers and with managers of native floral resources on this very important issue.

The bee industry contributes around $60 million a year to the Australian economy through honey and related products. But in addition, the contribution of pollination services to agriculture is estimated to be worth billions of dollars annually.

To allow us to continue to support farmers across the nation, we hope that a unified voice and a clear explanation of the minimal environmental footprint of bee keepers will maintain our industry s access to floral reserves.

These Best Management Practice guidelines show that we have set very high standards for ourselves. We expect bee keepers to meet these standards and to maintain strong commitment to environmentally sustainable practices.

Under the Federal Government s Advancing Agricultural Industries Programme, stakeholders from across the country joined forces to identify and resolve the most important aspects of native floral reserve access.

Significant consultation and spirited discussion have produced a practical and relevant Best Management Practice guidelines. Environmentally responsible bee keeping practices will help our industry to face up to the uncertainties of the future and continue to provide the efficient pollination services that sustain Australian agriculture.

I am confident that the implementation of these Best Management Practice guidelines will secure a sweet future for our honeybee industry.

STEPHEN FEWSTER
Chairman, Australian Honey Bee Industry Council

"This little animal is a valuable asset to Australia's agricultural future and long-term prosperity"

Background

The necessity for a National Best Management Practice set of guidelines for Australian beekeepers was initially tabled at a two day workshop held in Canberra in September 2005. Funds were successfully obtained from the Federal Government, and the project was completed by Dr Doug Somerville, Technical Specialist (Honey Bees), NSW Department of Primary Industries.

A committee was formed by the Australian Honey Bee Industry Council (AHBIC) of 20 persons to assist in providing feedback and direction to the process. They were Lindsay Bourke, Rex Carruthers, Paula Dewar, Leigh Duffield, Stephen Fewster, Ken Gell, Don Keith, Darryl Lawrence, Trevor Monson, Trevor Morgan, Ben Oldroyd, Elwyn Papworth, David Paton, Ed Planken, Greg Roberts, Doug Somerville (chair), Ian Stephens, Bill Weiss, Julian Wolfhagen and Ian Zadow.

Part of the process in developing a national set of guidelines for beekeeping in the Australian environment was the facilitation of a workshop in each state. Each state member beekeeping organisation within AHBIC was asked to identify and invite persons to participate in the development of a national set of guidelines.

Each workshop was provided with presentations on the formulation of industry codes and environmental management systems. The participants were then divided into small groups and given the tasks of discussing what it is that they want from the workshop, how detailed the guidelines should be and what should be the key elements. Discussions within the smaller groups and feedback within the larger group occupied the lions share of each workshop. Individually, each participant was also asked to complete a workshop feedback and evaluation form. The combination of responses from the workshop process and the feedback/evaluation forms was the basis of the National Best Management Practice for Beekeeping in the Australian Environment.

The facilitators at each workshop were Dr Doug Somerville, Technical Specialist (Honey Bees), and Nick Annand, Apiary Officer, both NSW Department of Primary Industries staff, belonging to the Honey Bee Industry Group.

The workshop participants for each state were:

QLD (13/2/07) – Peter Barnes, Neville Bradford, Carmel Burnham, Rex Carruthers, Paula Dewar, Bill Gordon, Bob Johnson, Don Keith, Tony Knight, Dave Learoyd, Rodney Ruge, Patricia Swift, Trevor Weatherhead.

NSW (23/2/07) – Neil Bingley, Warwick Bratley, Todd Duffy, Ray Hull, Bryn Jones, Craig Klingner, Mick Ryan, Bill Weiss, Eric J Whitby, David Mumford.

VIC (27/2/07) Linton Briggs, Robert Buntine, Mick Camilleri, Graham Connel, Ken Gell, Rod Gell, David Major, Bob McDonald, Robert McDonald, Trevor Monson, Marie Murley, Terry O'Kane, Bill Shay, Alan Smith, Eric Smith, John Ward.

TAS (8/3/07) – Lindsay Bourke, Rod Bourke, Yeonsoon Bourke, Reg Down, Hazel Hoskinson, Hedley Hoskinson, Norman Hoyle, Ian Marmion, Greg Rainbird, Graeme Raphael, Ian Stephens, Robin Thomson, Des Willmott, Julian Wolfhagen.

SA (27/3/07) – Leigh Duffield, Darrell Lawrence, Nadia McLaren, Jude Nettleingham, Barry Pobke, Michael Stedman, Michael Stone, Ian Zadow.

WA (20/4/07) Malcolm Briggs, John Davies, Stephen Davies, Harry East, Brendon Fewster, Colin Fleay, Jacqui Hay, Ron Hollett, Alan Kessell, David Leyland, Rod Pavy, Wayne Ridley, Tracy Shea, Bill Trend, Cheryl Wong, Wally Zajac.

Introduction

The Australian beekeeping industry is faced with mounting issues in a range of fields, the economic viability of commercial beekeeping is being continually squeezed and the threat of exotic pests and diseases is of major concern. The one over-riding factor with a greater capacity to affect the medium to long-term viability of the Australian beekeeping industry is the availability of suitable floral resources that will consistently produce pollen and nectar vital for the survival and productivity of a honey bee colony. Quite an extensive number of threats, past and present, have been listed by the beekeeping industry. They are:

- land clearing for agriculture;
- forestry activities that remove flowering trees;
- replacement of felled trees with pine and low pollen and nectar yielding eucalypt plantations
- fires, including back burning and natural bushfires;
- reduction in vehicle access to quality apiary sites;
- salinity affecting the health of the available flora;
- droughts, which reduce flowering and interrupt growth cycles;
- control of weed species that provide pollen and nectar for honey bees;
- urban sprawl, which reduces mature vegetation and limits the size of apiary sites due to safety concerns;
- loss of access to native forests because of transfer from State Forests to National Parks; and
- reduced access to native flora on private lands because of a perception by some landholders that honey bees are harmful to the ecosystem and a threat to personal safety.

Some persons in the community have taken the position that, as managed honey bees are exotic insects, they have no place in any conservation reserve.

This view is of increasing concern to the Australian beekeeping industry due to the ever-increasing area of land being gazetted under a conservation memorandum. The debate on the impact of honey bees on the Australian environment will not be resolved by any single event.

Even thorough the beekeeping industry has a clear objective of preserving native flora, the industry s position on access to government lands in particular is tenuous and will need a strong proactive stance to counter extreme views. By adopting a 'National Best Management Practice for Beekeeping in the Australian Environment, the beekeeping industry is in a more favourable position to demonstrate that it has a thorough understanding of its environmental impacts, and can adequately manage these impacts.

The honey bee industry stands for and depends on the preservation of native flora and hence has much in common with those in the community whose values support nature conservation and the establishment of conservation reserves. The National Best Management Practice for Beekeeping in the Australian Environment has been provided by the beekeeping industry to complement the conservation principles it has historically held. The future of the beekeeping industry is at risk while the health of the landscape is in decline. Beekeepers have acknowledged their concerns regarding the loss of floral resources for decades in their journals and in the political arena. During the development of the national guidelines existing regulations and conditions of use were reviewed. The guidelines developed in this document have gathered all of the key points from these various documents as they relate to the environment and incorporated them into the key elements.

Summary

The Australian beekeeping industries have long recognised the ideal of minimising any impact of their activities on the greater environment.

The formalising of a set of national best practice guidelines for beekeeping in the Australian environment demonstrates to the whole community the commitment that the Australian beekeeping industries has to ensure that it is doing everything in its power to eliminate and minimise its potential impact on the whole Australian environment.

The guidelines are provided for beekeepers to clearly understand their role to the greater community and also to provide to the public an outline of what all beekeepers should be adopting in their keeping and management of honey bees. The guidelines are not specific to any single beekeeping group and all elements may not be applicable to each individual manager of bee hives. For further information and detail on the elements, refer to the full set of guidelines.

The elements, in no particular order, are:

1) Respect for heritage and areas of interest to indigenous Australians.

2) Display warning signs in appropriate places to announce proximity of apiary to the public.

3) Maintain stocking rates to the floral conditions prevailing. Ensure colonies have adequate stored honey.

4) Ensure that the appropriate authorities have been notified of the arrival and departure of apiaries and they have the beekeeper s address and contact details.

5) Keep the area of the apiary clean and tidy.

6) Ensure appropriate availability of water when required.

7) Incorporate best management practice to reduce the incidence of swarming.

8) Maintain swarm traps in and around apiaries, particularly during the spring period.

9) Prevent the spread of soil pathogens such as phytophthora and weed seeds by vehicle movements. Clean footwear/shoes and vehicle after inspecting potential sites in high risk areas.

10) Regularly maintain and service vehicles according to manufacturer s recommendations.

11) No travelling on access tracks when there is a high likelihood of damaging the track.

12) Only the immediate area of the apiary is to be cleaned of combustible vegetation.

13) Only camp on site with the approval of the property owner or manager. All presence of the camp site to be removed once the camp is finished with.

14) All fire warnings and restrictions are to be strictly adhered to and local fire codes should be taken into consideration whenever working bee hives.

15) Whenever the opportunity arises, provide information on the value of nectar and pollen producing flora to highlight the value of specific floral species.

16) Locate apiaries with consideration of the general public and livestock movements. Stocking rates in urban areas should be appropriate to the circumstances.

17) Keep records of flowering events.

18) Consider the most energy efficient manner in which the beekeeping operation is conducted.

19) Store, use and dispose of chemicals in the most appropriate manner, according to state, MSDS and label requirements. Keep chemical use to a minimum.

Elements

ELEMENT 1:

Respect for heritage and areas of interest to indigenous Australians

Historic sites, old buildings, relics, and materials of obvious heritage significance should be left alone and not interfered with. Areas important to indigenous Australians should also be respected, and beekeepers are encouraged to honour the spirit of Native Title claims.

ELEMENT 2:

Warning signs

All apiaries pose an OH&S risk to the public. To manage the risks to the public, suitable signage in an internationally recognised format should be placed in proximity of the apiary to warn any approaching persons of the presence of the apiary. These signs should include sufficient information so the owner can be contacted, if required.

ELEMENT 3:

Stocking rates

It is normal practice for commercial bee hives to be placed in areas where there is an abundance of nectar and/or pollen. The actual quantity of floral rewards on offer will vary from species to species and from site to site, thus stocking rates will vary. A generic number of hives for an apiary would not be appropriate in all circumstances. If bee hives are to be left for any time, when not on a nectar flow, suitable amounts of stored honey should be left on each hive. Where the flowering intensity of the local flora is not adequate for the bees present, then consideration should be given to reducing the number of hives in an apiary to that of the carrying capacity of the pollen and nectar available or removing the apiary to a new site.

ELEMENT 4:

Communicate movement of apiaries

In most cases commercial beekeepers, and often amateur beekeepers, place their apiaries on lands not of their ownership. Some land agencies require, as a condition of use, that they are notified when a site is being used for bees. It is also a courtesy to inform all land managers of the imminent arrival of an apiary and the departure of the apiary. Land managers, if kept informed, can then consider the bees in their daily management schedules. This may include functions such as the use of chemical sprays, maintenance of tracks, hazard reduction burning, and the movement of livestock.

Ensure the land manager/owner has the apiarist's full contact details, including phone numbers, address and beekeeper registration number, so that contact can be made rapidly if required.

ELEMENT 5:

Remove rubbish

It is normal practice for an apiary to be moved onto a site when the floral prospects are attractive and there is a strong possibility of an ample surplus of nectar and/or pollen. Likewise, once a flowering event is coming to a finish, the apiary is normally shifted to another site with a suitable flowering event.

In the course of the management of the hives, hive materials that may be broken or damaged must be removed from the site. Scrapings and products from the hive must never be left on site.

Under no circumstances should household or industrial waste be left on site. If the beekeeper finds rubbish not belonging to them located on the apiary site, they should notify the relevant property manager and if possible make all efforts to properly dispose of the rubbish.

ELEMENT 6:

Provide water for bees

Ensure appropriate availability of water when required. In some states this activity is enshrined in legislation. Where water is close by, such as a creek, dam or river, water should not have to be supplied by the beekeeper. Honey bees, like all living creatures, require water to survive. In summer this requirement can equate to substantial amounts of water being collected by colonies and in extreme hot weather a colony will devote all of the available field bees to the collection of water.

The water consumption of a colony will vary according to the strength of the colony, the colony's location, and the ambient air temperature. Beekeepers should supply sufficient water for the apiary's needs if required to ensure that the colonies do not perish during hot weather, so that bees do not cause a nuisance around stock troughs and swimming pools.

An artificial water source should be placed within 200 metres of an apiary if a suitable, naturally occurring water source such as a dam, stream, or river is not within 500 metres. An artificial water source supplied by beekeepers must be suitably covered with mesh to prevent access by wildlife and their accidental drowning.

ELEMENT 7:

Swarm control

It is normally accepted good practice for a beekeeper to do all in their power to prevent a colony from swarming. Swarming is a natural phenomenon that ensures the survival of the species through a colony reproducing itself. Swarming normally occurs in spring, allowing the colony to establish itself over the following summer and autumn before winter brings a serious reduction in flowering species from which food can be obtained.

The selection criteria for commercial breeding stock does not tolerate any swarming behaviour. Feral bees, on the other hand, are much more likely to issue swarms than managed bees. Beekeepers should consider the following, particularly in the spring period.

- Re-queen on a regular basis – young queens have less inclination to swarm than old queens.
- Replace the queens in any colony that has swarmed, to reduce the possibility of future swarming.
- Relieve congestion in a hive in spring when colonies can expand in populations extremely rapidly.
- Continue to select strains of bees that demonstrate a low tendency to swarm.

Elements

ELEMENT 8:

Swarm capture

Invariably, some colonies within managed apiaries will swarm. Given the breeding of such stock, they possibly have a reduced chance of survival in the medium to long term compared to a swarm from a local feral colony. Managed bees are selected for rapid population gain so as to take advantage of major flowering events. A colony bred for commercial purposes and remaining on the one site is likely to experience significant shortages of food in the form of pollen and nectar, thus has a greater likelihood of starving. Even so, a beekeeper should make every endeavour to remove and collect swarms where clearly they have originated from the apiary under management.

For some unexplained reason, it is not uncommon for swarms originating from feral hives to be attracted to a managed apiary. In this case it is imperative that the swarms be collected and removed.

ELEMENT 9:

Prevent the spread of soil pathogens and weed seeds

Soil borne fungi and weed seeds have been known to be spread from one location to another by vehicle movements. Fire fighting, logging and road working machinery have all been implicated in the spread of fungi and weed seeds. Even bushwalkers and bike riders can spread fungi and seeds by the transfer of mud on their boots and tyres.

The movement and servicing of apiaries may also provide the opportunity to spread soil pathogens and weed seeds. To help stop the spread of soil pathogens and weed seeds, beekeepers, where possible, should:

- avoid driving in areas when soils are wet and sticky;
- stay on designated roads and tracks;
- in high risk areas for soil pathogens and weed seeds brush soil off vehicles and footwear before and after each trip – this would be a site by site decision;

- obey road signs that alert the driver to a possible problem in the area, e.g., phytophthora;
- use wash down or hygiene stations when provided;
- report any unusual plant deaths to the local Department of Environment, National Parks and Wildlife, Heritage or Conservation office;
- remove weeds where feasible from the immediate area of the apiary.

ELEMENT 10:

Minimise truck and vehicle emissions

In the course of keeping bees, the owner requires the use of a truck. Some beekeeping operations have ownership or control over a number of vehicles. To ensure the least impact on the environment, the following should be considered.

- Perform regular service and maintenance of each vehicle according to the manufacturer's specifications.
- Maintain tyre pressures to the manufacturer's recommendations.
- When given a choice of vehicles, choose the most economical one for the task in hand.
- When buying a new or second hand vehicle, consider the fuel efficiency rating.
- Where possible, work flowering events which require the least amount of travel.
- Place apiaries in the same region to reduce the distances necessary to service each apiary.

ELEMENT 11:

Track use and maintenance

As beekeepers are required, in most cases, to site apiaries on lands not of their ownership, it is important that the use of tracks and access routes be respected. Most tracks used by beekeepers are multi-use and not solely created for the benefit of siting bee hives.

Beekeepers have a duty of care to not travel on tracks or roads where it is known that there will be a strong possibility of causing damage to the surface. The circumstances will vary according to the integrity of the track/road, the materials it is constructed from, and the prevailing weather conditions. Poorly formed tracks on heavy soil during wet weather are likely to sustain heavy damage as a result of truck usage. On the other hand, tracks composed of sandy soils will be easier to negotiate during wet weather.

When a bee site is being considered, wet weather access should be a significant factor. If an apiary is located in an area where the soil type does pose a problem during wet weather, beekeepers should first consider the potential damage to the tracks and environment and delay use, if possible, until conditions improve.

Before taking on the task of repairing tracks and particularly bringing in materials from elsewhere, the beekeeper should consult with the land manager or property owner to obtain permission. If bringing in materials from elsewhere it is imperative that the introduction of soil pathogens and weeds are considered. Refer to Element 9.

ELEMENT 12:

Clearing of apiary sites

Site clearing must be completed with care to cause the least amount of disturbance to the local environment, while providing an adequate site for the placement of an apiary. To achieve this:

- rake or clear all loose surface litter on site before the placement of the bee hives;
- no trees greater than 20 cm circumference are to be damaged or removed;
- care must be exercised not to damage or destroy protected flora or fauna.

Elements

ELEMENT 13:

Camping

Historically, camping with the apiary on site has been a common practice by beekeepers. Such activity (probably), in most circumstances, is no longer warranted. If camping is a desirable activity to enable the beekeeper to manage their bees, permission should be sought from the government land agency or private property owner. All evidence of the camping activity must be removed once the camp is finished with.

ELEMENT 14:

Fire management

The very nature of beekeeping means that bee hives are at risk of bushfire damage and that a beekeeper's use of a smoker has the potential to cause a fire. Therefore, it is necessary for beekeepers to ensure that:

- the smoker used is in good repair;
- the lighting of a smoker is done on bare ground or on the back of a suitable vehicle;
- the smoker is kept full of fuel to avoid the spitting and escape of lit embers;
- the smoker is not placed on combustible material such as dry grass when in use;
- all fire bans are adhered to and respected;
- in the event of an emergency, e.g. to remove an apiary due to an imposing threat from bush fire, the local fire authorities should be notified first before attempting to do so;
- extreme care should be exercised when working hives with a smoker when the environment is dry and the conditions are windy;
- suitable fire fighting equipment is carried at all times and maintained in working order;
- a smoker is properly extinguished using water or placed in an airtight container when not in use.

ELEMENT 15:

Proactive environmentalists

It is in beekeepers' best interest for society to value and retain large areas of native flora. It is also in the industry's long-term best interest

to see floral species replanted in degraded areas and other suitable sites that are reliable producers of nectar and pollen. Therefore, beekeepers should:

- actively pursue a tree planting program on their own properties, selecting suitable species for the long-term prospects of providing a resource for honey bees and other nectivores;
- associate or become involved in the local Landcare group, assisting in planting and revegetation projects; emphasis should be placed on encouraging known high value nectar and pollen plants;
- whenever the opportunity arises, address or pass on to interested parties information on the value of various floral species as a resource for nectar and pollen.

ELEMENT 16:

Apiary site position

Locating an apiary may cause problems for people and livestock. The following should be adhered to.

- Place large apiaries away from houses.
- Keep numbers of hives in urban areas to a minimum. Depending on the size of the block, the following is a suggested recommendation as sufficient permanent hives close to an urban interface:
  - small block – 2 hives
  - average block (up to 1000 m2) – 4 hives
  - roomy block (up to 2000 m2) – 8 hives.
- Place apiaries away from gates, stock yards and public traffic areas.
- Wherever possible, position out of sight of public thoroughfares.
- Apiary site positions are to be checked with and approved by the land manager/owner prior to hives being unloaded.

ELEMENT 17:

Keep floral records

Beekeepers, by the very nature of their chosen profession, have to develop a high awareness of the environment in which they work. Successful beekeeping requires the timely movement of

apiaries from the completion of one flowering event to the beginning of another flowering event. Most commercial beekeeping operations on mainland Australia can be best described as nomadic. The locations and flowering events to which apiaries are moved will vary significantly from year to year. In many cases, beekeepers probably hold the most detailed knowledge on the flowering patterns of specific flora in given regions. Therefore, beekeepers should record:

- the floral species on which the apiaries are placed;
- the duration of flowering, climatic influence on flowering, nectar and pollen yields and any other specific information on the floral species;
- any peculiarities in relation to dieback and significantly reduced yields;
- changes over time in various areas or to the health and production of the flora.

This information should be in a form to assist scientific endeavour to identify trends over time associated with flowering patterns and the general health of the vegetation. The information collected can also be used in Element 15 to assist in providing advice on the suitability of various floral species and their relative worth of a nectar or pollen producing plants.

Beekeepers have been responsible for passing on observations on the declining health of specific vegetation and the demise of floral communities, triggering major research endeavours. Any significant observations regarding the decline in the health of the vegetation within the areas which beekeepers frequent should be passed on to the relevant authorities. Communication with such parties should be recorded for future reference.

Elements

ELEMENT 18:

Energy saving

Beekeeping in the Australian context is mainly focused on the production of honey. Honey combs are required to be extracted in a purpose built factory on a regular basis. Energy savings are possible during the extraction and storage of combs. Beekeepers should consider:

- turning off appliances when not in use;
- turning off cool rooms and hot rooms when not in use; use of cool rooms to prevent damage to stored combs from wax moth and small hive beetle may not be necessary during the winter period;
- where possible, full honey combs should be stored to allow a sufficient number of honey boxes to be accumulated for each extraction to cut down the number of times an extracting plant is required to be cleaned.

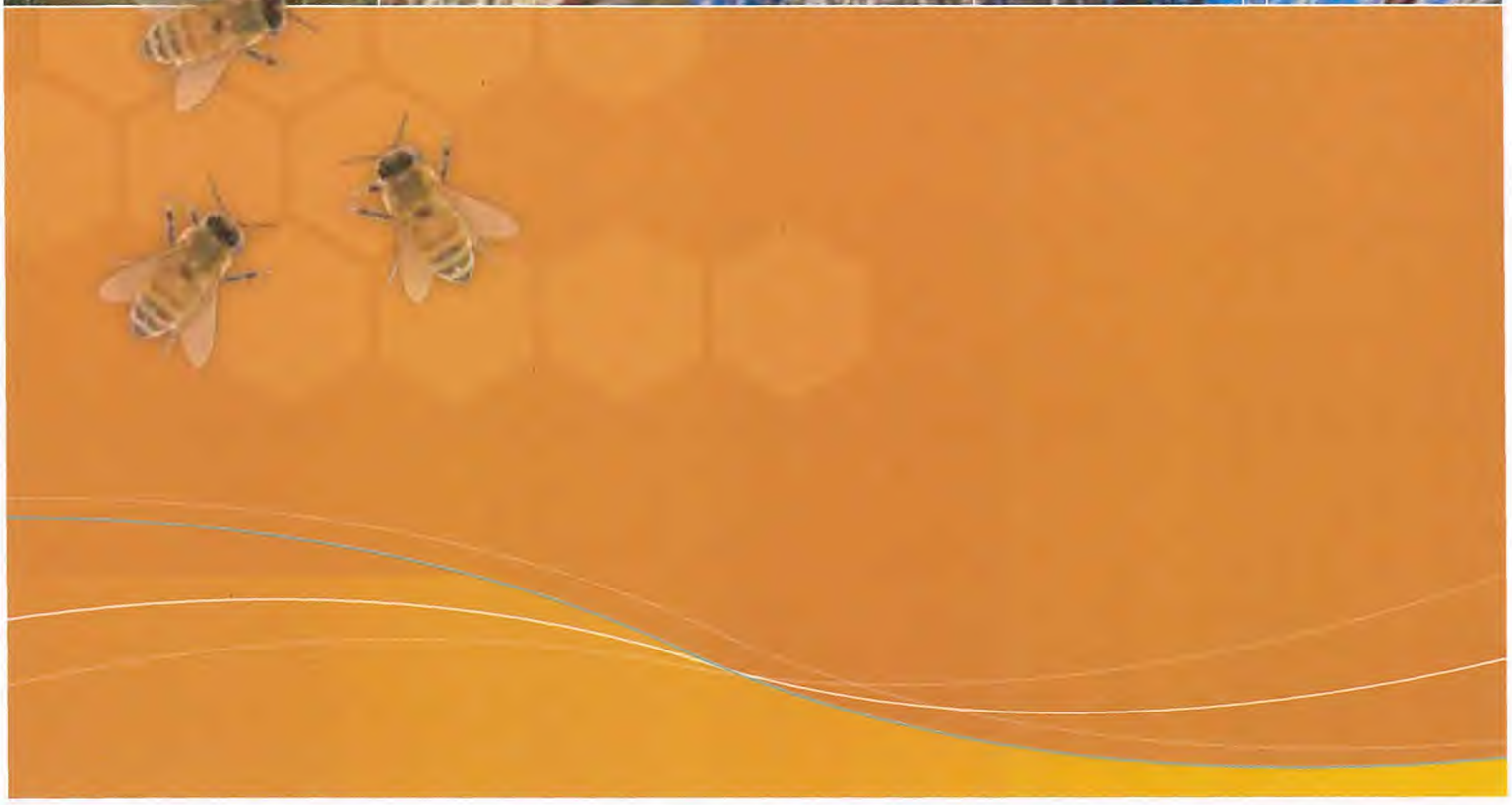
ELEMENT 19:

Responsible use of chemicals

The use of chemicals in the beekeeping industry is minimal compared to most primary industries. Even so, beekeepers have a responsibility to:

- consult land owners/managers before applying pesticides (herbicides);
- obtain the necessary qualifications to use chemicals in an agricultural business;
- follow the directions on the label;
- only use a product for the purpose it is permitted/registered;
- discard used containers and residues in an approved manner;
- retain and refer to the material safety data sheets for each substance being used;
- store chemicals in a safe and secure location;
- observe the withholding periods printed on the chemical label;
- notify any purchaser of honey of the use of any chemicals associated with obtaining the honey crop;
- keep up to date on the correct use of chemicals.

(Appendix ORD: 12.4A)



DRAFT Urban Beekeeping Code, to be recommended by the Western Australian Apiarist Society (WAAS), for all Local Government areas in WA

1.Introduction

Beekeeping is becoming increasingly popular in cities, towns and suburbs. The number of new hobby beekeepers has increased dramatically with the invention of the 'Flow Hive'. This document applies equally to the keeping of bees in conventional hives and to the keeping of bees using the Flow Hive.

Beekeeping provides honey for home consumption, enjoyment in watching bees and learning all about them and the opportunity to join an amateur beekeeping group. In general, the term beekeeping refers to the keeping of European Honey bees (apis mellifera). This Code is written referring only to that species of bee. WAAS does not purport to have any expertise or knowledge about any of the native Australian bee species.

European honey bees can and will sting when threatened or under duress. Stings are painful and can cause distress to the recipient of the sting. It is intended that this Code forms the prescription for harmonious cooperation between beekeepers and other land occupiers. The proper and responsible management of bees will ensure there is no undue impact on the community. In that way bees can be kept by hobby beekeepers without the need for any control other than registration with the state agricultural authority. Compliance with the Code will ensure that the keeping of honey bees does not have a negative impact on people, property, domestic animals or native fauna.

In Western Australia there are fewer serious incidents caused by bee stings per year than there are serious incidents caused by dog bites.

The purpose of this document is to form a reference and standard for the management of amateur beekeeping in Western Australian urban and suburban areas. Its intended uses include:

- *giving the community confidence in the safety of beekeeping activities;*
- *helping local government and regulatory bodies to establish uniform controls;*
- *providing a standard against which any complaints can be resolved; and*
- *providing a standard with which beekeepers should comply.*

In preparing this document, we have reviewed the Codes of Practice published by the relevant authorities in QLD, NSW, ACT and VIC and a Code of Practice produced by the Southern Beekeepers Association Inc of Tasmania. We have also referred to research by the City of Subiaco (its Beekeeping Local Laws Summary 2016) and a submission by Alan Langridge to the City of Wanneroo also in 2016.

2. Definitions

Apiarist / Beekeeper - a person keeping bees.	**Honeycomb-** removable frames containing wax cells which house honey, pollen, and/ or brood (eggs, larvae, pupae).

Apiary-

a place where honey bees are kept in hives.

Apiculture / Beekeeping-

the management of beehives.

Beehive / Hive-

modular framed housing for a honey bee colony, which normally contains either a nucleus colony or a standard size colony.

Bee sting-

injury sustained and inflicted by the venom from a honey bee worker.

Colony-

a family of bees: workers, a queen and drones

Feral bee colony-

a colony of bees which has its nest in a place other than a beehive, e.g. a hollow tree

Flight path-

the distinct route taken by many bees leaving from or returning to their hive.

Foraging bees-

bees seeking out supply of water or feed; bees naturally forage flowers for nectar and pollen supplies.

Honey flow-

the gathering of nectar from flora by honey bees.

Honey extraction-

the removal of honey from combs.

Honey super-

a super which is full of honey

Pollination-

the transfer of pollen by honey bees from anthers to stigmas of flowers for the purpose of plant fertilisation.

Robber bees-

bees attempting to access stored or spilt honey, or honey in another hive.

Sticky super-

A super from which most of the honey has been extracted, and which contains honey residue

Super-

box containing frames, placed above the bottom or brood box of a hive.

Swarm-

cluster or flying mass of honey bees

3. Requirement to Register

All beekeepers in Western Australia are required to register with the Department of Agriculture and Food (DAFWA). That requirement exists for amateurs with one or more conventional hives or Flow Hives, just as it exists for professional beekeepers. The registration process is inexpensive and registration forms are available on the department's web site (www.agric.wa.gov.au). Upon registration the beekeeper is issued with a unique identifying brand with which they are obliged to mark every hive. Registration must be renewed annually for as long as the beekeeper keeps bees.

4. Applicable Legislation

In WA, beekeeping must be carried out in accordance with the Biosecurity and Agriculture Management (Identification and Movement of Stock and Apiaries) Regulations. This is legislation which applies state-wide.

In addition, most local authorities have by-laws which cover beekeeping locally; these are available from individual councils, but are generally not uniform.

One of the goals of this Beekeeping Code is to encourage uniformity across all local authorities in the by-laws governing beekeeping. Very few Local Authorities employ inspectors or decision-makers with beekeeping expertise. This Code establishes the principal criteria which all beekeepers should follow, thereby relieving Local Authorities of the need to have in-house expertise.

5. Beekeeping Groups

In WA, the peak beekeeping body is the Bee Industry Council of Western Australia (BICWA). Its members are the various professional beekeeping associations plus the Western Australian Apiarists Society (WAAS).

WAAS has a membership of mainly amateur and hobby beekeepers with a few commercial beekeepers. Urban beekeepers are strongly encouraged to join the WAAS in order to benefit from its educational events promoting good beekeeping practices (consistent with this Code). The society holds many events plus beekeeping courses, field days and monthly meetings with opportunities to learn from visiting speakers and to socialize with other beekeepers (both experienced and novice).

6. Swarms and Bee Enquiries

Swarming is a natural occurrence, primarily in spring and early summer. Members of the public concerned about a swarm of bees usually contact the local authority, many of which keep a list of beekeepers willing to capture and remove swarms.

The WAAS web site also lists names and contact details of beekeepers who are available for swarm collection (www.waas.org.au).

Some individuals nominate a charge for this service.

Refer to the item below for notes on the control of swarming.

7. Urban Considerations

7.1 Hive Densities

One of the primary controls to minimize the potential conflict between people and bees is to manage the density, or concentration, of hives in urban and suburban areas. The table below gives the recommended numbers of hives per allotment, assuming that the beekeeper, is registered and also observes the other

recommendations in this Code such as heights of barriers at boundaries, working hives in fair weather, etc.

This table complies with the National Best Management Practice for Beekeeping in the Australian Environment (from the Australian Honey bee Council) with reduced numbers for small allotments to further reduce the chance of nuisance complaints in higher density urban areas.

Allotment area	Maximum Number of Hives
up to 400 m^2	1
400-1000 m^2	4
1000-2000 m^2	8
2000-4000 m^2	16
>4000 m^2, if urban zoned	Seek advice from WAAS
For hives on rooftops:	Seek advice from WAAS

At certain times of the year, e.g. when splitting hives, some additional hives should be permitted for short periods.

It should be noted that these are recommended maximum hive numbers; the configuration of surrounding dwellings and their surroundings, including gradients of terrain, will influence the actual suitable maximum number of hives on a particular block of land. The flight path to and from hives will also need consideration.

7.2 Hive Placement & Barriers

Correct placement of hives is a most important consideration for responsible beekeeping in urban situations. The hives must be in a dry, quiet area of the allotment, out of sight from roads and footpaths. That normally will mean in rear gardens and not in front gardens. Position the hive so that it is approached from the side or rear and will be maintained from the side or rear.

Hives should not be placed within 3m of a neighbouring property, unless a solid fence or impenetrable plant barrier, not less than two metres high, forms the property boundary. Note that most local authorities in Western Australia require specific approval be obtained for fences more than 1.8m high.

Separate hives similarly from roads and footpaths and outdoor eating areas on the allotment, doors and openable windows of buildings.

Face the entrance of the hives in such a direction that bees fly across your property before crossing a boundary. If this cannot readily be done, consider placing barriers along the boundary. These can be in the form of hedges or shrubs, or instant barriers consisting of shade cloth fixed to a trellis, high enough to ensure that bees crossing the boundary are well above head height. Bees will then fly up and over these structures and should not worry neighbours.

Hives are best positioned with the hive entry facing North-East and will need ample winter sunshine (full sun if possible) to minimize the risks of diseases such as Nosema and Chalkbrood. Shading during summer can be provided using shade cloth structures or similar.

Position hives with adequate space for their maintenance. A space of a minimum 1m wide will be needed along one side of the hive and a minimum of 60cm wide along the opposite side. A space approximately 1.5m wide is needed behind the hive and the bees will need at least 30cm clear (preferably 50cm) in front of the hive entry. In total these dimensions mean that the hive and the working area around it will total about 2.5m by 2.1m.

Avoid placing bee hives within paddocks used by horses, cattle and other large animals, unless the hives are in a fenced off area. This is to avoid the hives being knocked over if used as scratching posts by the animals.

7.3 Swarming

Swarming is a natural behaviour of honey bees and occurs chiefly in spring to early summer. Swarms should be collected when in the cluster stage to prevent them flying to nearby properties and establishing in houses, trees or similar sites, thus becoming a nuisance.

Honey bee colonies should be managed to prevent or minimise swarming.

The most effective measure in the prevention of swarming is the replacement of old or failing queen bees with new ones, preferably ones with a low genetic disposition to swarm.

The splitting of a colony of honey bees into two or more units by the beekeeper will also reduce its population and its likelihood to swarm.

Other measures include the provision of additional supers for brood rearing and honey storage. It is critical that the queen has adequate space for the rearing of brood, especially when queen excluders are used to restrict her to the brood chamber. To that end the beekeeper needs to have in place a management process to replace old brood comb with frames of fresh foundation in the brood chamber.

7.4 Capturing and Hiving Swarms

Beekeepers should take responsibility for a swarm that has issued from one of their hives, and capture and hive it as soon as possible after it has formed into a cluster.

7.5 Provision of Water

Beekeepers are required to provide water close to their hives (maximum 10m distant, preferably within 5m). Bees prefer water from a sunny place with capillary moisture, for example wet sand or gravel, the edge of a concrete pond, or floating water weeds. If you establish these sources, there is much less chance of bees visiting swimming pools. In hot weather, bees use a large amount of water to maintain temperature and humidity within the hive.

7.6 Pesticides and Herbicides

Do not use pesticides and herbicides when bees are foraging. For bees to forage the air temperature needs to be 15C or more

7.7 Docile Bees

Honey bee colonies managed in urban areas should be maintained with healthy queens of a docile strain. Docility is one of the main selection criteria in queen bee breeding programs. There are a number of queen breeders in Western Australia most of whom sell through the retail beekeeping outlets. Queens can occasionally also be acquired through WAAS from hobbyists.

Where a hive's behavior is consistently aggressive despite good beekeeping practice, the queen should be replaced with a new queen from a reputable breeder.

Younger queens tend to be more vigorous which helps maintain the health and strength of the colony as a whole.

7.8 Robber Bees

When nectar is scarce, honey bees may rob honey from any source they can find outside their own hive. Exposure of honey (including sticky honeycombs) to honey bees in the open will encourage robbing. This is poor beekeeping practice as it can increase the risk of disease spread and can increase the risk of neighbours being stung.

When the beekeeper notices robbing starting to occur after opening a hive, the hive should be re-assembled and closed as quickly as possible. Robbing can escalate quickly to a frenzy, resulting in real nuisance for the beekeeper.

7.9 Disease Control

Despite Western Australia being largely disease-free, there are a few honey bee diseases here, of which American Foulbrood (AFB) is the most serious. Beekeepers should be cautious about mixing hive equipment, or purchasing hives unless from known AFB free apiaries.

Some bee diseases are 'notifiable', and urban beekeepers should be familiar with the Biosecurity and Agriculture Management (Identification and Movement of Stock and Apiaries) Regulations.

A good information source for diseases and pests to which bees are at risk is the series of leaflets issued by DAFWA and available on their website (www.agric.wa.gov.au).

7.10 Flight Paths

Beekeepers must manage their hives to minimize the risk of interference with neighbours and the general public, particularly in those areas used intensively for public access or recreation. An important element of this is the location of hives, so that the bees' flight paths to and from the hives, when on their foraging

flights, are consistently at least 3m above public footpaths or recreation areas.

7.11 Robbing (Harvesting) and Working Hives

Avoid working or robbing hives in cold, windy or wet conditions. In such conditions bees become aggressive, and the potential for trouble increases.

Beekeepers should cooperate with their neighbours when they need to work bees and ensure their neighbours are not working or relaxing outdoors at the time. Try to make hive manipulations as quick as possible so there is minimal disturbance to the bees.

Domestic animals should be kept indoors when bees are being worked, and until the bees have settled down afterwards.

Use clearer boards (sometimes called escape boards) to prepare honey supers for harvest. This is much less disruptive to the bee colony than the shaking, brushing or blowing methods. Boards are available from beekeeping suppliers.

7.12 Lights

On warm nights, bees are attracted to house lights, particularly fluorescent ones. If the windows are not screened, problems can occur. Beekeepers should place physical barriers between their hive entrances and neighbours' lights.

7.13 'Bee Poo'

Bees sometimes defecate when in flight and this can have an adverse effect on neighbours' properties, e.g. windows, cars, clothes on washing lines. This is most noticeable when a hive is affected by the disease Nosema. Keeping bees healthy and disease-free helps remove the problem (siting the hive to receive plenty of winter sun is important). Additionally this problem can be mitigated by siting hives where the bees' flight paths will cause least 'bee poo' problems.

8. General Considerations

8.1 Transportation of Hives

Beekeepers must take appropriate care when transporting hives of honey bees. All loads of hives and supers of honey must be secured in accordance with the Road Regulations. The beekeeper needs to take all precautions to avoid losses of bees en route

The stopping off at fuel stations or travel through built up areas with bright street lighting and traffic lights could cause loss of stock and not be in the public's best interest. Travel routes, refuelling and breaks should be carefully planned prior to departure.

Ideally, beehives should be transported by the Closed entrance method.

Points about this method include:

this method allows an owner to shift bees a short distance and unload without being stung, by blocking the hive entrance with a foam strip or similar;

hives must be fitted with adequate ventilation so bees don't suffocate;

bees can be shifted in a conventional station wagon vehicle as well as on a truck;

hives can be closed at night after the bees, clustered at the entrance, are smoked and driven inside the hive; and

shifting should be done at night when all bees are at home and when temperatures are coolest.

8.2 Use of Smoke in Hive Management

Smoke is used by beekeepers as a management aid to subdue honey bees when opening hives.

Smoke the entrance of hives before mowing or using weed slashers close to your hive/s. These machines, along with the smell of cut grass, upset bees, and operators or people passing by may be stung.

The use of the bee smoker is controlled by fire regulations. On days of total fire ban it is prohibited to light and use a smoker.

On all other occasions, when a smoker can be used, the following rules must be followed:

- light the smoker in an area devoid of combustible material;
- do not set the smoker down on combustible material whilst in use. Many beekeepers keep their lit smoker in a metal bucket at all times;
- do not place the smoker on neighbouring hives or in a position where it can be dislodged by wind or easily knocked over;
- extinguish the smoker completely when finished; and
- water (at least 5 litres) must be readily available at the site.

8.3 Protective Clothing

When opening a hive, it is strongly recommended to protect the head and face with a hat and veil, or with a bee suit. If a full-length suit is not worn, it is good practice to wear long-sleeved shirts and long trousers of a light colour when working bees. Gloves are a useful addition to protective clothing to reduce the number of stings received by the beekeeper, especially when manipulating the brood.

8.4 Honey Sheds

Honey houses/extraction rooms should be bee proof. The return from the field of honey supers and the

extraction process itself will invariably invite robber bees. Sticky frames (post extraction) are equally highly attractive to robber bees.

Under no circumstances should sticky frames/supers be left out in the open to be cleaned up by foraging bees. This is not only a bee disease hazard but increases the risk to community members of bee stings.

8.5 Removal of Un-managed Hives

Colonies of bees in hives need to be actively managed. If a landowner has a hive on their land which, for whatever reason, is not being actively managed by a beekeeper, it is recommended that they arrange for a registered beekeeper to remove it, or to start actively managing it on their behalf.

8.6 Notification of Neighbours

Beekeepers are advised to notify their neighbours of their beekeeping activities and should re-assure them that they will always comply with this Code. A gift of a bottle of honey at harvest time almost always helps maintain a positive relationship with neighbours.

9. Acknowledgements

The reference material used in preparing this document included the draft Code of Practice for Urban Beekeeping in Southern Tasmania (the Southern Beekeepers Association of Tasmania), the Beekeeping Code of Practice for NSW (Doug Somerville), the Guidelines for keeping bees in Queensland (Queensland Government), the Code of Practice for Beekeeping in Residential Areas of the ACT (Territory and Municipal Services), Victoria's Apiary Code of Practice, published by the Victorian Department of Planning and Community Development and the National Best Management Practice for Beekeeping in the Australian Environment (The Australian Honey Bee Industry Council).

(Appendix ORD: 12.5)

Shire of Dardanup

EQUAL OPPORTUNITY & DIVERSITY PLAN 2019

Human Resources
Administration Centre – Eaton
1 Council Drive I PO Box 7016
hr@dardanup.wa.gov.au
www.dardanup.wa.gov
(08) 9724 0000

Acknowledgement of Country

The Shire of Dardanup wishes to acknowledge that this meeting is being held on the traditional lands of the Noongar people. In doing this, we recognise and respect their continuing culture and the contribution they make to the life of this region by recognising the strength, resilience and capacity of Wardandi people in this land.

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EQUAL OPPORTUNITY IN EMPLOYMENT

The Local Government aims to provide an environment of fairness and equity in its workplace. Council believes that equal opportunity creates a more harmonious and productive workplace, which not only benefits Council, but also, the wider community.

Council considers it the right of every individual to carry out their job in an environment which promotes job satisfaction, maximises performance and provides economic security. Such an environment is dependent on it being free from all forms of harassment, discrimination and victimisation.

Council operates under the following State and Federal legislation (as amended):

- Local Government Act 1995
- Public Sector Management Act 1994
- WA Equal Opportunity Act 1984
- The Racial Discrimination Act (Cth) 1976
- The Sex Discrimination Act (Cth) 1984
- The Human Rights and Equal Opportunity Commission Act (Cth) 1987
- The Disability Discrimination Act (Cth) 1992

In accordance with the WA Equal Opportunity Act 1984, the Local Government shall develop and maintain an Equal Opportunity Management Plan.

DEFINITIONS

Discrimination is treating someone unfairly due to their race, sex, marital status, pregnancy or breast feeding, impairment, religious or political conviction, age, family responsibility, family status, sexual orientation to include gay, lesbian, bisexual and heterosexual or gender reassigned person. These grounds may change as legislation is amended.

Harassment is defined as any unwelcome, offensive comment or action relating to the grounds of discrimination. It is behaviour towards another employee that is offending, humiliating or intimidating. It shall not be condoned and if necessary, disciplinary action shall be taken.

Any individual who experiences harassment should immediately make it clear to the person(s) concerned that such behaviour is unwelcome. However, if the individual has difficulty in doing this, then assistance should be sought from others to meet with the person(s) concerned.

Workplace Bullying is defined as repeated, unreasonable or inappropriate behaviour directed towards a worker, or group of workers, that creates a risk to health and safety.

PROCEDURE

It is the responsibility of all staff to ensure that proper standards of conduct as contained in the Local Government's Code of Conduct are upheld in the workplace. Management and staff in supervisory positions shall ensure that the work environment is free from all forms of bullying, harassment and discrimination.

Allegations of discrimination or harassment may be discussed or assistance sought from management, Contact Officers or Human Resources.

In all cases, the utmost care shall be taken to investigate allegations impartially by recognising the rights of all parties. The confidentiality of any allegation shall be maintained by all employees involved in investigating and resolving the issue.

The Local Government will not tolerate victimisation of any party.

If an employee is dissatisfied with the outcome of any conciliation attempt, they may take the matter up with the Equal Opportunity Commission, Fair Work Commission or their Union.

Grievance, Investigation and Resolution Procedures can be found in the Shire of Dardanup Administrative policy manual.

WORKPLACE BULLYING

The Shire of Dardanup considers workplace bullying unacceptable and will not tolerate it under any circumstances.

Workplace bullying is defined as repeated, unreasonable or inappropriate behaviour directed towards a worker, or group of workers, that creates a risk to health and safety. Workplace bullying may cause the loss of trained and talented employees, reduced productivity and morale and create legal risks.

Shire of Dardanup believes all employees should be able to work in an environment free of bullying. Directors, managers and supervisors must ensure employees are not bullied. Shire of Dardanup has grievance and investigation procedures to deal with workplace bullying. Any formal complaints of workplace bullying will be treated seriously and investigated promptly, confidentially and impartially.

Shire of Dardanup encourages all employees to report workplace bullying in accordance with the Commission for Occupational Safety & Health Guidelines. Directors, managers and supervisors must ensure employees who make complaints, or witnesses, are not victimised.

Disciplinary action will be taken against anyone who bullies a co-employee. Discipline may involve a warning, transfer, counselling, demotion or dismissal, depending on the circumstances.

EQUAL EMPLOYMENT OPPORTUNITY

In accordance with the Local Government Act 1995 (as amended) the Council shall recruit in accordance with the principles of merit and equity and shall ensure that

discrimination does not occur. Promotion opportunities with the Council shall be directed towards providing equal opportunity to all employees provided their relevant experience, skills and ability meet the minimum requirements for such promotion.

All employment training with the Council shall be directed towards providing equal opportunity to all employees provided their relevant experience, skills and ability meet the minimum requirements for such training.

The equal employment opportunity goals of the Council shall be designed to provide an enjoyable, challenging, involving, harmonious work environment for all employees where each has the opportunity to progress to the extent of their ability.

COUNCIL'S OBLIGATIONS

The Local Government has a legal obligation to make sure that the Council is free from discrimination and harassment. The following laws state this requirement:

- WA Equal Opportunity Act 1984
- The Racial Discrimination Act (Cth) 1976
- The Sex Discrimination Act (Cth) 1984
- The Human Rights and Equal Opportunity Commission Act (Cth) 1987
- The Disability Discrimination Act (Cth) 1992

Council also has a moral obligation to ensure its staff is not subjected to other forms of harassment or bullying. All employees are expected to treat each other with consideration and respect at all times.

RESPONSIBILITIES

The overall responsibility for monitoring the effectiveness, the policy and management plan lies with the Chief Executive Officer, however Council recognises that equal opportunity is the responsibility of everyone in the Council, and as such will ensure that advice on equal opportunity matters is available on an on-going basis to all staff.

The co-ordination of the equal opportunity function within Council is primarily the responsibility of the Grievance Officers as appointed by the Chief Executive Officer.

The **Grievance Officers** are responsible for:

- The maintenance of equal opportunity statistics;
- The distribution and maintenance of the EEO & Diversity Plan;
- Ensuring that the EEO & Diversity Plan is in accordance with legislative requirements;
- The identification, organisation and evaluation of equal opportunity training to meet Council's equal opportunity and diversity goals;
- Ensuring recruitment and selection procedures for Council are not discriminatory;

- Providing advice and/or assistance to employees who feel they are being discriminated against, bullied or harassed;
- Coordinating investigations for a discrimination, bullying or harassment complaint;
- Recording informal and formal allegations;
- Making and carrying out training recommendations.

Other employees within Council have responsibilities for ensuring the implementation of equal opportunity. These employees include Directors, Managers, Supervisors and individual employees.

Directors are responsible for:

- Promoting the aims and objectives of the equal opportunity policy and objectives;
- that staff of the section (or who they supervise) participate in equal opportunity training;
- Ensuring that Directors, Managers and Supervisors fulfil their responsibilities in regards to equal opportunity;

Managers and Supervisors are responsible for:

- Ensuring that staff of the section (or who they supervise) are acting in a non-discriminatory manner, free of harassment;
- Ensure that all new staff of the section (or who they supervise) attend Council's induction training;
- Ensuring that all new staff of the section (or who they supervise) have equal access to employment and training opportunities subject to individual, section and corporate priorities;

Chief Executive Officer, Directors, Managers and Supervisors are responsible for:

- Ensuring that as soon as they are in receipt of a complaint it is acted upon promptly.

All employees of Council are responsible for:

- Treating all work colleagues equally, in a non-discriminatory manner and with consideration and respect;
- Undertaking equal opportunity training provided by Council;

APPROACH

The strategy that Council will implement to achieve the EEO and Diversity Plan includes:

1. Devise policies and procedures to meet the legislative requirements;

2. Communicate those policies and procedures to the staff of council;

3. Collect and record appropriate information;

4. Review human resources practices within the Council (including recruitment techniques, selection criteria and training) with a view to identifying any discriminatory practices.

PURPOSE

The purpose of this plan is to create an environment of equal opportunity and diversity to achieve good working relationships.

The Outcomes of this plan are as follows:

1. Council values Equal Employment Opportunity and diversity.

2. Council provides a work environment is free from sexual and racial harassment.

3. Council workplaces are free from employment practices that are biased or discriminate unlawfully against employees or potential employees.

4. Council employment programs and practices recognise and include strategies for Equal Employment Opportunity groups to achieve workforce diversity.

5. Council will maintain a relevant and achievable Equal Employment Opportunity Management Plan through communication, review/amendment and evaluation.

Outcome 1 The organisation values EEO and diversity and the work environment is free from racial and sexual harassment.				
Initiative	**Task /action**	**Timeframe**	**Accountability**	**Measures of success**
Equal Employment Opportunity (EEO) and diversity principles are incorporated into corporate values, business planning processes and human resource workforce plans.		Under review	Executive and Human Resources	Review and adoption of the Plan.
Managers and leaders are aware of their EEO responsibilities.	Equal Opportunity Essentials for Managers – training provided by the WA Equal Opportunity Commission	March 2019	Managers and Human Resources	Training completed
Performance management criteria for managers and leaders include the ability to attract and retain a diverse workforce and promote an inclusive work culture.	Managers and supervisors are to promote and discuss this Plan at annual performance reviews.	November	Managers and Supervisors	Details recorded with performance reviews.
Induction programs incorporate EEO and diversity principles, including awareness of the EEO management plan.	Induction presentation has been reviewed and updated to include a Workplace Bullying video	July 2018	Human Resources	Induction program updated.

Outcome 2 Workplaces are free from employment practices that are biased or discriminate unlawfully against employees or potential employees.				
Initiative	**Task /action**	**Timeframe**	**Accountability**	**Measures of success**
Recruitment and selection practices provide equal opportunity and flexibility for all employees and potential employees.	Advertised vacancies provide contact details of HR and we accept applications in various formats.	Ongoing	Human Resources	Advertised vacancies are placed on Seek, newspapers and on relevant job boards. Applications are accepted in both hard copy and electronic formats.
Training in bias free methods is provided to selection panel members.	HR practitioners provide clear direction to selection panel members	Ongoing	Human Resources	Interview questions are reviewed by HR and amended to remove any bias. HR practitioners are on all selection panels.
Retention and career development practices provide equal opportunity and flexibility for all employees.	Review of study policy provides more options of study delivery	Ongoing	Human Resources	Staff retention increase.
Human resource management policies, procedures and job descriptions are reviewed for both direct and indirect bias and potential barriers.	Introduction of position description classifications using a matrix	Ongoing	Human Resources	HR has introduced a classification matrix to enable a clear and consistent approach.
There is an effective grievance resolution process where people feel able to raise concerns and issues.	Yes	Ongoing	Human Resources	Evidence of complaints being appropriately dealt with.
Employee terminations are monitored through exit interviews. Outcomes are evaluated to determine emerging patterns.	Yes	Ongoing	Human Resources	Reference to exit interviews to evaluate any EEO and diversity issues raised.

Outcome 3 Employment programs and practices recognise and include strategies for EEO groups to achieve workforce diversity.				
Initiative	**Task /action**	**Timeframe**	**Accountability**	**Measures of success**
Demographic data is systematically collected to monitor and report on the progress of all diversity groups.	Collected but not monitored	Annual	Human Resources	Data results.
Workforce planning incorporates appropriate strategies to attract and retain employees from diversity groups.	All people are encouraged to apply for all positions.		Human Resources	Increased diversity of applications.
Advertising methods are enhanced to attract diverse applicants.	Adverts for vacancies are pinned up on public notice boards in our facilities.		Human Resources	Increased diversity of applications.
Strategies are developed and implemented to attract, retain and provide career development opportunities for the diversity groups:				
Women in management				
Aboriginal Australians				
People with Disability				
People from culturally diverse backgrounds				
Youth	Apprentice & Trainee		Human Resources	Trainee and Apprentice appointments.
Other (please specify)	Emerging Leaders		Human Resources/Managers/Directors	Retention and promotion of employees.

Outcome 4 Maintain a relevant and achievable EEO management plan through communication, review and amendment and evaluation.				
Initiative	**Task /action**	**Timeframe**	**Accountability**	**Measures of success**
The Plan and its policies and programs are communicated to all staff.	A report will be provided to Council. When the Plan is adopted HR will communicate the plan and policies using our usual methods.	January 2019	Human Resources	
Equity and diversity events are promoted and celebrated.	accessAbility Day hosted at the Eaton Community Library End of year Function	December 2017 & August 2018		
The Plan is monitored, reviewed and amended to ensure strategies remain relevant to the operations of the organisation.	Introduction of bi annual Diversity & Inclusion Questionnaire	October 2018	Human Resources	
The Plan and its policies and programs are evaluated to determine the effectiveness of the Plan.				

Any general comments your authority would like to make:
It is with pleasure I present to you the Shire of Dardanup EEO & Diversity Plan for 2019 - 2021 This EEO & Diversity Plan has been developed in accordance with Part IX of the *Equal Opportunity Act 1984* and is aligned with the Director of Equal Opportunity in Public Employment's EEO and Diversity Outcome Standards Framework. Workforce diversity is a business imperative and is part of good human resource management practice. An inclusive and accepting workplace has benefits for all employees. A diverse workforce will attract and retain quality employees, which translates into effective business decisions and effective service delivery. Our EEO & Diversity Plan is the foundation for a working environment free from harassment and discrimination. Through the implementation of this Plan we will strive to build a workforce and supporting organisational culture that reflects the diversity of the greater community. Our Plan is a live document that we will continue to develop and build on for our future success. I encourage all staff to embrace equity and diversity within the organisation. We value EEO/diversity and aim to ensure that the work environment is free from racial and sexual harassment and that employment practices are not biased or discriminate unlawfully against employees or potential employees. Our employment programs and practices recognise and include strategies for EEO groups to achieve workforce diversity. I look forward to ongoing commitment and involvement from all staff in implementing this EEO & Diversity Plan.

I am satisfied that the information provided in this report is accurate to the best of my knowledge.

CEO Name:	**MARK L CHESTER**	Date:	
CEO signature:			